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BUFFALO MEDICAL JOURNAL

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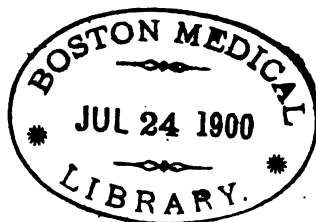
VOL. LV.—XXXIX. (New Series.)

AUGUST, 1899, TO JULY, 1900.

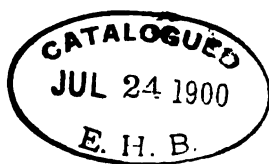


BUFFALO.

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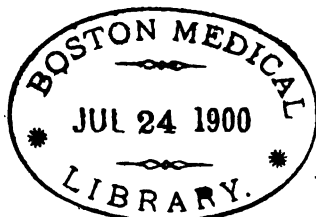
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BUFFALO MEDICAL JOURNAL.

VOL. XXXIX.

AUGUST, 1899.

No. 1.

Original Communications.

CHRISTIAN SCIENCE METHODS.

By NELSON W. WILSON M. D., Buffalo, N. Y.

THE christian science evil has become so prominent of late by reason of the unusual number of deaths which have followed the administration of prayer, that the authorities in almost every big city in this country have been forced to take some action looking to a checking of the system of treatment.

In Buffalo, the recent Saunders case at Fort Porter, while not the first death from neglect, was the most prominent because of the general surroundings; and further, because it happened within the jurisdiction of the United States authorities. There is also another fact which will add interest. This is that it was by the merest chance that the christian scientists were thwarted in their efforts to hush up the matter and hurry the body under ground.

If there is one kind of man who knows more about things in general than any other kind of man it is the United States soldier—the seasoned private or non-commissioned officer. He has grown into the habit of keeping his eyes and ears open and his mouth shut. When he talks he is invariably interesting. When he is serious and you know him, you can depend upon him. It was thus that I got to be fairly well acquainted with christian science and christian science ways, while serving as assistant-surgeon at Fort Porter last fall and winter. The soldiers knew much of christian science; some of them had read Mary Baker Eddy's book and the magazine published in the interest of the organisation and were well versed in the ground work of the faith. Others—one in particular—had taken christian science treatment, and had returned to the hospital office for relief from a trouble, which Neisser discovered was due to a gonococcus. From

these men I gathered much interesting information, and in speaking of the death which must necessarily follow neglect, in serious cases, my informant, who was a particularly intelligent man, said :

The reason that so little is said, is because whenever they see a person is going to die, the "healers" abandon their work, and the family sends for a strange doctor. They tell him how sudden was the illness and all that sort of thing and when the patient dies they get a death certificate and everything is smoothed over.

There are reasons why this man's opinion was valuable,—reasons which cannot here be stated. Suffice it to say, he had studied christian science, was hand and glove with the scientists for a long time and had taken the "treatment." He is not now a believer, and I presume should he meet the soldiers' fate in the far-away Philippines, it would be credited to his backsliding and not to the penetrating powers of a Filipino bullet.

I had wondered often how the scientists secured permission to bury their dead. The explanation of the soldier solved the mystery, and at the same time showed the great laxity in furnishing certificates on the part of physicians.

When the Saunders boy was first taken ill at Fort Porter, there was the general post gossip concerning his illness,—such as naturally follows the illness of any child; a little more maybe, in view of the fact that he was the child and relative of christian scientists. He was living at a government post. Dr. Walter D. McCaw, captain and assistant-surgeon U. S. Army, was in charge, and I was his assistant. At no time was Fort Porter without the services of a medical officer, who attended all cases at the post without fee. The Saunders boy, as has been told, went from bad to worse, and finally died. As his breath was leaving his body, Dr. McCaw was hurriedly sent for. Very properly he refused to give a certificate and reported the matter to the coroner's office, where, immediately a mystery was made of it. It was kept from the newspapers,—by what influence has not yet appeared. The greatest secrecy was maintained in all quarters. At the Fort that morning I met one of the post mortem examiners, who had been sent to view the body and give a certificate,—in fact, he was *instructed* to give a certificate. I suggested that the death occurred on government property, that a physician was within call at all times, that one had been sent for at the time of death, and had refused to give a certificate, and that an investigation was within the range of possibility. Under these circumstances, and in view, too, of the fact that there

was scarlet fever at the post, I thought he would be remiss if he did not determine the exact cause of death before giving a certificate.

My suggestions were acted upon, the case was reported to the District Attorney of Erie County, thence to the U. S. District Attorney, and post mortem disclosed the cause of death to have been pneumonia.

Had the officials gone on as they were first headed the secrecy of the coroner's office would have been maintained, the child would have been buried quietly, and christian science would have said he "passed on" owing to some evil influence.

Since that time the newspapers have been full of christian science "passings on," the most horrifying of all the cases happening at a little place called Bowling Green, near Toledo, O. There a four-year child died in great agony from the presence in his throat of a grain of corn. A local physician informed the family that an operation was urgently required, but the family turned over the case to a female faith curist.

In explanation of the child's death this woman says there was a lack of faith on the part of the boy's father, which interfered with her ministrations.

In Chicago, New York, Brooklyn, Philadelphia and even Boston, the head center of the cult, there have been cases almost as inhuman.

Just what christian science is and how it is taught has been ably exploited by a reporter of the *New York World*, who became a healer for the purpose of giving to the public the truth. He spent three weeks studying in an institute at Lansingburg, N. Y., paid \$100 and got a certificate.

In his report he tells many strange things hitherto unknown to the public. His introduction is racy reading, too. He says :

Empowered as I am, I have the right to go into a sick room and banish from it the physician and nurse who may be in attendance there. I can forbid their entrance into the room after my coming upon the scene. I can take all the medicine bottles, as I should do if I am a good straight christian scientist, and throw them out of the window. If my patient is swathed in bandages I can take them off or tear them off, as sometimes I might have to do, and leave gaping wounds exposed to the naked air and the healing influence of christian science.

Should my patient be suffering from a dozen different fractures of bones or strains of tendons, I can remove all the splints and feel assured that the broken ends of the bones will be held together by the simple influence of mind.

To go still further, I can let the little sick, suffering child, who is battling with fever struggle for breath unaided by anything to

relieve it but the supposed irresistible influence of love. As its life ebbs away, breath by breath, I can still refuse to allow any physician to come near the room while I sternly maintain that nothing is needed there but myself and the tenets and principles of Mrs. Eddy's Science and Health.

If the helpless cripple with spinal trouble is brought to me, whose poor frame is supported by the latest and most improved system of steel frame work, I can at once taboo all such paraphernalia and say: "This wretched invalid needs nothing of the kind. His limp backbone needs but the strength of mind. His flaccid joints require nothing but recognition of the fact that there is nothing really the matter with him. If he wishes and I wish and the Divine Principle wishes, he can walk in any go-as-you-please contest to-morrow."

All of this I can do, so say the christian scientists, because I have taken my regular course of study. I own the degree of "C. S." and I am thoroughly qualified to banish sickness from that part of the world which I can reach.

The only exception to this treatment, which is admitted by christian scientists is in cases of obstetrics. There the christian scientist bows in humility and submission to the accoucheur and the midwife. As a body they go even further. They have schools of obstetrics and midwifery of their own, and while still adhering to the infinite influence of mind and the spirit, they still, strange to say, admit and practice all that is known to the regular practitioners of the most orthodox school of medicine.

One startling truth brought out by this course of study was that christian scientists seldom or never practice for love, or do charitable work, even among the poor. Later this will be referred to more specifically.

When the novice first went to Lansingburg, he saw Mrs. Harriet L. Betts, the chief healer and "first-reader," who was extremely suspicious and cross-questioned him severely, as to whence he came, who sent him and whether he had ever been healed by treatment. She was very reserved, and held out little hope. Finally, she relented and agreed to take the reporter as a student after very rigid questioning. The writer says:

Mrs. Betts did not ask me if I was a reporter, but said that she was afraid at first that I was.

"You know," she said, "that in these days of persecution we have to be very, very careful. The newspapers have been trying all they can to find what they can say against christian scientists."

"Is there anything christian scientists have to hide?" I asked.

"No," she said boldly, "there is not. But our cures have been so marvelous and so many that we have the whole medical fraternity against us. Not only that, the Roman Catholic Church has determined to join in with the medical men and fight us tooth and nail."

Before the reporter was finally admitted to the class he had to subscribe to these questions :

1. Do you still believe in drugs or medicines of any sort ?
2. If you were taken sick yourself would you send for the doctor ?
3. Would you place yourself in the hands of a christian science healer ?
4. Are you convinced that God is all in all, and that mind is all that is needed to correct error ?
5. Are you sincerely in earnest in wishing to become a christian science healer, and do you agree faithfully to adhere to the tenets of the mother church as laid down in the church manual ?
6. Do you recognise that the writings of Mrs. Dr. Mary Baker Eddy are the only authoritative works in christian science, and do you look upon Mrs. Eddy's Science and Health, with Key to the Scriptures, as our principal text-book ?

Naturally, every lesson in christian science requires a book, and this book is written by Mrs. Eddy. The books average \$5.00 each, and the quality averages up to about a 50 cent volume in a bargain-day sale. There are \$3.00 volumes, but you must not get them—they are too bulky. The \$5.00 books are the ones recommended.

The reporter's first lesson was a plunge into the "recapitulation," and of this first instruction he writes :

Some parts it was indispensable that I should memorise word for word. To begin with :

Question—What is God ?

Answer—God is divine principle, supreme incorporeal being, mind, spirit, soul, life, truth, love.

Question—What is the scientific state of being ?

Answer—There is no life, truth, intelligence nor substance in matter. All is infinite mind and its infinite manifestation, for God is all in all. Spirit is immortal truth ; matter is mortal error. Spirit is the real and eternal ; matter is the unreal and temporal. Spirit is God, and man is his image and likeness ; hence, man is spiritual and not material.

Those two questions and answers form the basis of christian science teaching. They are also a trap for the unwary student, for at any moment the teacher will single out some individual member of the class and ask him, "What is God?" If he makes one mistake in phraseology he will receive a black mark in the books.

The second question sprung upon you unawares, never fails to confuse. To prove this let any one take these two questions and answers, memorise them today with all possible care and see how nearly he can write them out a week hence with close attention to punctuation and capitalisation.

He will then be able to realise one of the first stumbling blocks in the study of christian science.

When I had promised that I faithfully would study these questions and answers over night my first lesson began. It consisted of a series of statements on the part of the teacher, backed up liberally from quotations from "Science and Health" and the bible, to show that there is nothing in the universe but Mind. That Mind is God and

that man is but the reflection of God and, therefore, the reflection of mind.

In order to begin the study of christian science with any degree of understanding several things must be taken for granted. Christian science is about 1,000 times more unintelligible to the beginner than the first book of Euclid is to a dull schoolboy.

As in Euclid, christian science contains several so-called axioms from which you are never allowed to depart. The first one is that God is All in All, that God is Mind, that God is good; that, therefore, if God is All in All, and there is nothing but God or Mind, and if God is good, there can be nothing which is not good.

So it followed that so-called sickness does not really exist, because it is not good. Sin also has no existence, as that is evil. As God is all-powerful he will not permit the existence of sin, because he will not allow anything that is not good.

This is difficult for the ordinary, common-sense business man to understand. If you say you do not understand it the scientist says it is because you are not able; that he can understand it thoroughly, because he has reached that stage of his progress which he calls "realisation."

The teacher tried to make it easier for the new students by various similes. For instance, there is no such thing as sickness, she said, because God is good and all-powerful. The imaginary ailments of mortal men simply seem real to the sufferer because he does not realise the actual presence of God and Mind.

The blind man cannot see the light because his eyes are closed to it. The light is there, nevertheless. A dark room really is not dark, because there is no such thing as darkness. It simply appears dark because the light is not there, and in any case it is impossible to get a room so dark that there is not some degree of light.

In the same way there is no such thing as cold. It simply is the absence of heat. To prove this there is no known degree of cold obtained, but a still colder degree can be reached. In other words, there is no negative to anything. All is positive.

In further proof the teacher went on to show that silence is the absence of sound, cold the lack of heat, darkness the want of light, sickness and sin the need or non-realisation of Divine Mind.

When this had been drilled in the student for two hours, he was obliged in self-defense to contradict it or admit it was so. An admission that he did not comprehend it endangered his position in the class. It was much better boldly to deny these things than to say "I do not understand."

In the latter case he was looked upon as hopeless and little attention was paid to him. In this first lesson no attention was paid to healing. It simply was a sort of groundwork laid as a foundation for the supposed state of perfection necessary in order to become a healer.

When students are pronounced perfect in the recapitulation they are taken into the healing mysteries. They are called "perfect"

when they can answer these questions satisfactorily according to Science and Health.

What are spirits and souls?
 What is the science of soul?
 What is substance?
 What is life?
 What is intelligence?
 What is mind?
 Are doctrines and creeds a benefit to man?
 What is error?
 Is there no sin?
 What is man?
 What are body and soul?
 Do not brains think and nerves feel, and is there no intelligence in matter?
 Is it important to understand these explanations in order to heal the sick?
 Does christian science or metaphysical healing include medication, hygiene
 mesmerism or mediumship?
 Is not materiality the concomitant of spirituality, and is not material sense a
 necessary preliminary to the understanding and expression of spirit?
 You speak of belief. Who or what is it that believes?
 Do the five corporeal senses constitute man?
 Will you explain sickness and show how it is to be healed?
 How can I progress most rapidly in the understanding of christian science?
 Have christian scientists any religious creed?

Now comes some startling revelations. Says the reporter :

I was surprised to find that christian scientists do not ignore diagnosis. They do their best to determine the exact disease in every case they treat. 'This they do by symptoms, the same as the ordinary physician.

In the next important step, however, they inquire into the cause or "causation," as they call it. In this they differ radically from the regular practitioner. All diseases are looked upon as "claims" or "beliefs."

The patient is said to suffer from a "belief" of a bald head or a "claim" of cancer. His head is not really bald—he simply cannot see the hair there, or part it either, for that matter. Another invalid would be said to have a "claim" of carbuncle. The carbuncle is not there—it does not exist. He simply is foolishly poulticing his evil imagination. In what might be termed the pathology of christian science diseases are classified somewhat roughly. The cause of rheumatism, for instance, is not exposure to cold and wet, but exposure to the hatred of enemies.

No amount of water in the trenches, according to christian science, could ever have given rheumatism or fever to an American soldier at Santiago. But a malicious thought on the part of his Spanish enemy would be liable to throw him into the hospital for months.

The teacher gave an instance of rheumatic fever in which she frankly admitted she had erred in treatment. By a diligent inquiry

among the man's neighbors she thought she discovered that her patient had a violent hatred for his mother-in-law. She proceeded with her treatment on those lines.

She brought herself to realise that this poor man could not hate his mother-in-law. It was impossible. She knew that God made mothers-in-law, just as He made everything else. All that God made was good. Therefore, mothers-in-law must be good, no matter what people might say to the contrary.

Strange to say, the man's rheumatism did not get better, and the teacher was worried. It was not until she found out that the man had no mother-in-law, never having been married, that she was able to bring her treatment in a direction to cure him.

From this on the lessons were full of these anecdotes, or "demonstrations," as the teachers called them, and became highly interesting.

All accidents resulting in sprains, or burns, or broken limbs are caused by fear, not necessarily on the part of the unfortunate who met with the accident, but in the mortal mind, perhaps of some one near and dear to the sufferer. In consequence of this it is very important to conquer all semblance of fear whenever it is met. No mother could safely bring up a child if she was afraid something was going to happen to it. It was only by realisation that the child was safe from all harm that it could be prevented from falling down a well or getting run over by a trolley car.

Now here is something which will interest Dr. Park. For years and years the medical profession has been working and studying to determine the source of cancer, and now the christian scientists dismiss it in a breath, saying it is caused by jealousy. All Dr. Park has to do now is to stamp out jealousy and he will have the cure for cancer.

Liver troubles are caused by interfering with other people's business, and neuralgia is the result of covert sneers and ridicule. Now let the story be told by the reporter :

But before teaching us anything in the way of practical healing the principal asked us in a body what we thought ourselves would be the proper method of procedure.

"Now we will suppose," she said, "that you are called into a sick room where there is a little child suffering with a 'claim' of whooping cough. What is the first thing you would do?"

There were various replies to this. One student said that he would leave word at the door that the doctor should not be allowed to enter the house.

"Good," said the teacher, "but there is something far more important than this."

Another student suggested that she would open her "Science and Health" and look the case up in that text-book.

"That is right, too," assented Mrs. Betts, "but you seem all to have forgotten the main thing. Therefore, I will take an imaginary case of whooping cough and tell you first how you should go to work and treat it.

"In the first place half the battle ought to be won before you reach the house. When you are summoned, you will probably be told the nature of the case. You will hear that the child is very low and perhaps not expected to live. The first duty of the true, earnest christian scientist is to treat him or herself before he ever reaches his patient. When you are told that the child has whooping cough you will at once say to yourself, 'This is not so; there is no such thing as whooping cough. God made that little child the same as he made us all and the Divine Mind certainly never intended that the poor little frame of that child should be racked by anything so distressing as whooping cough.' If by the time you reach the sickroom you have been imbued with this thought, with a proper sense of 'realisation,' you will find that there is already a change for the better.

"If the anxious parent has been putting goose oil on the child's throat you will tell her to throw the bottle away. If the little chest of the baby is wrapped up in flannels you will take them off. You must then insist that no one enter the room but the mother, and not even she while you are there.

"Now comes the hardest part of your work. There never was a case of whooping cough or measles or scarlet fever but what was caused entirely by maternal fear. Every fond mother who starts in to raise a child waits anxiously for the period when her offspring is mortally supposed to be subjected to the various children's diseases. Where that fear exists to any extent there is no possible escape for the child, consequently you will, in a case of this sort, help to treat both mother and child.

"By constant, earnest realisation you must remove all fear from this mother's heart. Then you will see how much you are helped in treating the child itself. Never for one moment must you forget to go back to the first principle of christian science. You must remember that God is all in all; that sickness is but an error; that error does not exist in reality, being but the absence of truth.

"Now," said the teacher, with a beaming smile, "don't you see how easy it all is?"

To some of the class it must have appeared perfectly easy, for there were loud vociferations of assent.

"When once you have restored the truth to that poor little suffering child error will have departed, and if it be a new case to you you may be just as surprised at the sudden recovery as the troubled parents are. Let me tell you right here that the most perfect cures

of whooping cough have been accomplished instantly, or in less than five minutes. In the many dozen cases that I have treated myself a change in the child's breathing has been noticed almost as soon as I entered the room."

"But supposing," ventured one student, who had not the faith of some of us, "that the breathing of the sufferer does not improve? Supposing the baby does not seem to get well and looks as though it were going to die?"

"Babies never die," corrected the teacher. "But if you should enter the sick room with any such fear as you now express it is quite possible that the child would 'pass on' or—as the mortal mind calls it, 'to die.'"

"But," persisted the doubtful student, "supposing I had no such fear when I entered the room. Supposing I fully realised that there can be no such thing as error, that mind is superior to anything, and the child does not improve, but seems to get into a more dangerous condition; is not that possible, even though my own realisation of the truth be perfect?"

"Yes," assented Mrs. Betts, "that is possible and sometimes happens, but such a contingency is always caused by one thing. When you find that in spite of all your efforts you have made little or no progress you will find that somewhere in that household there is both scepticism and malice. Somebody in that family has been opposed to your coming there. In that case it will be your duty to find out who it is. In this it will be necessary to exercise a certain amount of tact.

"When you find out your opponent, generally speaking, it will be the father and not the mother, or perhaps one of the grandparents, you must devote your attention to him. You must take him to one side and bring to bear upon him all the tact which you can summon to your aid. It will be better to appeal to him first in a material way. Ask him if it is not a fact that before you came the doctor had not done any good, anyway. Ask him if he doesn't know that physicians kill ten times as many persons as they cure.

"Put it to him, even if he does not believe in christian science, whether he does not consider that medicine and drugs in ninety-nine cases out of a hundred do more harm than good. Then when you have got him to admit all this leave it to his sense of justice whether he is not willing that the child's life should be saved, even though it be accomplished by something he does not understand or believe in.

"At the same time you must never forget that there is no real opposition either to you or to divine science in this man's heart. It is simply that the truth is not there. I have come in contact with many cases of this sort and never failed with the proper amount of tact and earnest realisation to win a victory for the blessed truth."

The particular instruction given in whooping cough coincides with the treatment of all children's diseases, and christian scientists,

from my personal observation, seem to have a large number of such ailments placed in their hands.

The next case taken up by the teacher was that of pneumonia, and I listened anxiously to this treatment, as I had been unfortunate enough to suffer with that generally fatal trouble myself.

It is insisted by christian scientists that they have never lost a case of pneumonia. They point to the large list of deaths from this disease where nothing but medical treatment has been used. The teacher then went on to give the history of a case of inflammation of the lungs where she had encountered any amount of family opposition.

The wife of the man who suffered was a christian scientist, but the mother of the sick man was an avowed enemy of anything of the sort. It was a battle between wife and mother-in-law. The doctor who had been treating the case had left a Spanish fly blister to be applied. This the wife's mother-in-law was determined should be used according to the doctor's directions.

The sick man himself was too near death, apparently, to object to any sort of treatment.

In the difficulty that confronted the science doctor under these circumstances she made up her mind that the Spanish fly blister could do no harm in any case. She brought herself to realise that Spanish fly was an error; that on a true child of God it would be powerless to operate.

"And," she continued, her face shining with triumph, "although the Spanish fly was left on the man's chest for over twenty-four hours, it failed to raise a blister! There was scarcely even a red spot where it had been applied."

From the whole course of my study it appears to me that the basis of treatment in all cases of disease by christian science is the same. The only difference is in the careful selection of "causation," or the alleged original cause of the disease.

Rheumatism is caused by hatred. In its treatment it is necessary to discover where the hatred exists, and then by realisation that God and mind never intended that there should be any hatred in his dominion, that in fact there is no hatred in existence, but only the imagination of it—in other words, the error of it, or the corresponding absence of love—to bring about a reassertion of the truth.

With the eighth lesson of our course the students were supposed to be well on in practical treatment or healing.

Although each separate disease is taken in detail, the treatment in itself was always the same thing, simply a realisation on the part of a healer to overcome the error that appeared to exist by the reassertion of truth.

But before leaving practical treatment and healing, our attention was called to several difficulties which were bound to present themselves to young beginners in the labor of Christian science.

During the whole time of our tuition we students had not only faithfully to attend to class but we were forced constantly to study

our text-book—Science and Health. We did this. There was no escape from it. We were at all times liable to individual examination as to the progress we had made in that respect.

Now that we were supposed to be sufficiently advanced in the pathology and therapeutics, as you might call them—and as christian scientists do call them—of christian science, our attention was brought to bear upon the obstacles that would present themselves to us in our practice. The first and most dangerous of these was what they called "chemicalisation."

Chemicalisation is described in Science and Health as: "The process which mortal mind and body undergo in the change of belief from a material and spiritual basis. The upheaval produced when immortal truth is destroying erroneous mortal belief. Mental chemicalisation brings sin and sickness to the surface, as in a fermenting fluid, allowing impurities to pass away."

This christian scientists attempt to explain by showing what happens when an acid and an alkali meet and ferment, bringing out a third condition, or salt. Chemicalisation often aggravates the symptoms of disease, they say, and will generally account for a patient getting worse instead of better.

Many of the students, and I know I did, hailed this new development with delight. It seemed as though it would be a handy thing to account for apparent failure.

It was good to know that no matter how strong might be your own individual realisation, if your sick man obstinately refused to improve or even seemed to get worse the trouble could be accounted for by this welcome term, "chemicalization."

If, for instance, you were treating a case of typhoid fever with no effect whatever and if much to your consternation the patient developed new troubles in the shape of boils, or anything else, it was simply "chemicalisation."

It was the truth combating with error for victory and coming out in the shape of an eruption. We were gravely informed by the teacher that, in some cases, "chemicalisation" might be displayed so severely that the patient would "pass on," in other words, die in spite of all our efforts.

Next to persecution "chemicalisation" is said to be the greatest enemy and drawback to christian science. From what I could gather "chemicalisation" was often caused by persecution, that is, the struggle between truth and error. But in spite of the fact that I paid close attention to everything that was taught me regarding "chemicalisation," I could get at no certain means of overcoming it.

The truth I was told was bound to prevail in the end, yet, it was frankly admitted that chemicalisation had occasionally caused death, or "passing on." We received the comforting assurance that as we became greater in our power of healing we would meet less of the bugbear, "chemicalisation," until it would finally disappear altogether.

The only conclusion I could come to with regard to the handling of this enemy was to follow an advice much resembling that of "Chuck" Connors, who tells you to "Forget it."

The next serious foe we were told we should have to meet was a sort of twin enemy—malice and envy. These enemies would appear to us mainly in the shape of regular physicians and clergymen.

The medical fraternity, christian scientists say, cannot help envying christian scientists, because of the wonderful cures the latter perform wherever they go. The malice of the clergy is encountered because christian science teaches people to think for themselves.

The first duty of a christian scientist is not only to banish the medical man from the sick room and throw away his medicine, but bring the patient to a condition where he has lost all faith whatever in any sort of drugs.

In this connection, however, we were taught that a certain amount of liberality was not always ill-advised. If a patient wore bandages that had been put on by a physician it was not always necessary to take them off.

While, as christian scientists, we felt convinced that bandages could do no good, still, with a proper realisation of the truth, we could prevent them from doing any harm, so that where their removal might provoke anger or malice it was sometimes a good thing to let the patient wear them.

The same thing applies to sticking-plaster. While plaster cannot possibly help a cut or a wound it cannot hinder what may be accomplished by mind. Consequently the liberal-minded christian scientist does not taboo sticking-plaster. But in all cases ointments and lotions are sternly forbidden, as they contain drugs.

A case which I saw treated myself of badly chapped hands was treated with nothing but love. The first command to the patient was that all the cold cream which he had applied should be at once washed off.

Baldness, scientists claim, has repeatedly been cured by christian science, where all other applications have failed.

To the skeptical student, and I must confess I was one, there were many glaring inconsistencies that I noticed even among the most devout christian scientists. On special occasions where the class listened to testimony from many patients who had been healed there were several cases given where decayed teeth had been replaced, simply by the influence of mind.

Yet I noticed that many of the scientists did not hesitate to have recourse to the practical work of the dentist. Gold fillings in christian scientists' teeth are quite conspicuous, as they are very careful of their personal appearance. If I should judge the rest of the class by my own feelings, I know that the last lesson was hailed with delight by all of us.

We were by this time enabled to talk glibly of mind, soul, spirit and love, and some of the class maintained stoutly that they had reached the stage known as "realisation." For my own part I

must frankly confess that I had not, yet the teacher asserted several times that I was the most promising student she had.

At the final lesson and graduation each individual member of the class was closely questioned. The student had supposititious cases of sickness given to him, and was asked what he would do.

It seemed that we fully came up to the standard, for Mrs. Betts informed us that she looked upon her May, '99, class as the most gratifying one she had had.

There was quite a lot of sentiment and affection in the address in which she bade us farewell and sent us out into the world with our degrees of "C. S." Then she touched upon a few matters that were certainly of great importance to those of the class who really intended to practise christian science healing.

One piece of advice was undoubtedly good and welcome to all of the students, except myself.

"When you begin to practise," she said, "you may, perhaps, have some scruples about accepting payment for your work. I want to impress upon you that you must banish all such silly ideas from your minds at once. You must not only make people pay you, but you must make them pay you well.

"Remember all the doctors' bills that you are going to save them; think of the enormous amount of money that these poor mortals pay out every year for drugs and medicines that cannot possibly do them any good. If it is right to pay a doctor for having no effect upon you whatever, surely it must be right to pay for positive help and relief.

I want to warn you all against using your personality. No matter how attractive you may be personally, you must sink that and rely entirely upon mind. The moment you allow your personality to creep into your work you are approaching dangerously near hypnotism. There is nothing good in hypnotism. It was never intended by the divine mind that one person should have any personal power over another."

And that is christian science !

CATARRHAL DEAFNESS—A MORE FAVORABLE PROGNOSIS.¹

By SARGENT F. SNOW, M. D., Syracuse, N. Y.,

Aurist and laryngologist to the House of the Good Shepherd, Shelter for Unprotected Girls, and the Syracuse Free Dispensary.

THE apathy of the medical profession regarding so-called "catarrhal deafness," the lamentable resignation of the afflicted, and the improved facility for combating this disease, impels me to ask your indulgence for a few moments; further apology I feel

¹. Read at the thirty-first annual meeting of the Medical Association of Central New York, at Auburn, October 18, 1898.

is unnecessary. Your sympathies have been too much excited by the deaf, to require excuses for a paper written in the hope that a better prognosis may be hastened.

For many years the chronic type of this affection baffled the skill of the foremost otologists. Each apparent success was dimmed by the progressive nature of the disease, and gradually it took a place in the list of nonpreventable and incurable maladies.

I shall not assume that those almost totally deaf can be much improved, but we must admit that recent advances have changed the prognosis in other conditions, why not in many cases of chronic catarrhal deafness?

A study of the anatomy of the parts shows us the intimate relation of the nasal and aural membranes, both by continuity and sympathy. What benefits the nose, is in the right line to benefit the ear in some degree. It matters not whether we have to deal with an atrophy or a sclerosis, our first duty is to relieve the nasal passages of all abnormal conditions.

The aural affections that accompany or follow la grippe, measles, scarlet fever, and the like, we will pass over rapidly. They are essentially catarrhal, and have extended from the active pharyngeal inflammation always present in those diseases. As you well know, they are very aggressive, frequently causing rupture of the drum-head, or what is sometimes more harmful to the subsequent auditory function, a lymphoid deposit within the middle ear. Either of these conditions are amenable to treatment, if inaugurated promptly, the first by antiseptic cleansing and the second by systematic inflation.

The sudden cases of deafness, caused by ordinary acute or subacute catarrhal inflammations can usually be handled by the general practitioner, if a mild alkaline solution, as Seiler's or Dobelle's, be sprayed into the nose twice a day, and the ear inflated three times a week by the Politzer method, but the most careful attention of a trained specialist is required in the commonly termed incurable chronic cases.

This latter class of patients, recognised by a history of deafness, varying from one to twenty years, which may have progressed insidiously, to a degree where the acuometer can just be heard, and at a distance of two feet we have to ask our questions in a loud distinct voice, is the one deserving earnest consideration, and the most patient, skilful treatment.

During the past seven years, it has been my good fortune to be consulted by many patients whose deafness, by age, tests, duration

and degree, was surely caused by a chronic catarrhal state, and whose intelligence enabled me to show them the why and wherefores of the persistent line of treatment necessary in such deep seated cases. A number have been under observation five, three and two years, giving a good opportunity for impartial judgment on the methods in vogue at the present day, and I am glad to say that the principle of treatment, as suggested by such advanced authorities as Greuber, Dench and others, that all pathological conditions within the nose and naso-pharynx must be removed, and suitable stimulative absorbing agents introduced through the Eustachian tubes into the middle ear, have proved to be correct.

The idea is rational, and it is my firm belief that a principal reason for many failures is our lack of courage in recommending patients to persistently submit, from year to year if necessary, to atonic and alterative treatment of the membrane. We have been led to expect too much from operative work when with 80 per cent. of our cases recurring catarrhal inflammations still remain as an important causative factor. In younger subjects with deafness of one or two years' standing, the removal of turbinate pressures, ethmoidal disease or adenoids may be followed by much improvement in the auditory function without special attention to the middle ear, but with those cases giving a history of five, ten or twenty years impairment of hearing we are sure to find that the inflammatory action within the ear and Eustachian tubes will continue if we do not so institute a thorough and persistent course of after treatment.

Chronic catarrhal deafness is a preventable disease. In every one of these patients we will find that there is some habitual transgression of nature's hygienic laws—unseasonable clothing, improper diet, bathing, heating and ventilation, exposure to draughts night or day, too little exercise, and the like. Here is where our greatest effort must be put forth. These errors must be corrected and the bodily surface toughened by cold baths and friction, for when membranes have once been in a state of chronic congestion, dietary and other excesses, or the taking of a slight cold, will produce a profound impression on the weakened blood-vessels.

A few patients afflicted with this disease give no history of nasal catarrh, but we will invariably find the post-nasal and Eustachian membranes in some stage of inflammation, frequently pale and relaxed, but very sensitive. This class need little operative work,

but require regular stimulation, as with a light spray of iodol and ether, 2 gr. to the ounce, together with close observation. Their habits must be looked into and so regulated that they are better able to resist colds and throw off congestions.

Assuming that our patients are sensible and intelligent people, it is just and expedient that we go quite into details in explaining nature's method of repair and the different steps of treatment. No further encouragement or promise is necessary if we make the points clear. An ignorant, unreasonable patient is not a favorable one, for they fail to appreciate the obstacles to be overcome and the great need of regular and careful attention.

Surrounded as most patients are by unfavorable climatic influences, and tempted by the good things of life to unhealthful indulgence, we do wrong to encourage them in thinking that they will have no relapses, but we can assure them that these relapses will be much more tractable and easily subdued.

A plan that appears reliable in chronic catarrhal inflammations is to see that each removable cause is taken care of, then after the parts are healed, make a new test of the hearing and begin the second stage of our work. A vapor of camphor and iodine by interrupted jets, applied through the Eustachian catheter serves well a treble purpose of toning up relaxed or atrophied membranes, increasing ossicular mobility and absorbing inflammatory products. These treatments should be gauged according to the individual case in hand,—some every day, some twice a week, but each with the most particular care until sensitiveness of the tubal membranes is removed, the relaxed blood-vessels toned up, and we cease to get more improvement in the hearing.

A rest from active treatment can then be permitted, but the patient should be instructed to report again at the office as soon as an increase in deafness is noted. These periods of rest may become longer and longer until three to six months are allowed.

An interesting feature is that many times after these periods of rest, through nature's good work, we can push the improvement further than at our previous attempt seemed possible, and to a point where the patient is satisfied or perfect hearing established.

We must not expect much improvement in hearing during or soon after the operative stage, but nature's power of regeneration is truly wonderful, if causes for inflammatory action are removed and local tonic application to the membranes are steadily made.

Under the foregoing plan of procedure, many of the cases that

have been given an unfavorable prognosis, because they failed to improve with a six or eight weeks' course of treatment, can be taken up and very satisfactory results obtained.

In an article read by the author before the American Rhinological, Laryngological and Otological Society last May, under the title, Modern possibilities in chronic catarrhal deafness, detailed reports of time required and methods used in some obstinate cases, representing three distinct ages and periods in life, were made. Quoting from the same I would again say:

The question does not seem to be so much whether we have an atrophic or hypertrophic condition, but did the deafness primarily occur as a catarrhal inflammation, or is there so much fixation of the ossicles as to preclude a possibility of relief, except through operative procedures?

If examination shows that the trouble be a catarrhal process, and there is a chance of stretching adhesions and absorbing inflammatory products, each year's added experience has given us more courage to make a favorable prognosis.

Many practitioners are opposed to the treatment of deafness in particular, and catarrhal affections in general. This influence is felt in families, and in those cases where prompt, energetic measures are imperative, may become pernicious. Their opposition is honest and comes from the unfavorable prognosis given by authorities for whom they have great respect. We maintain that the conclusions of these authorities were based on experience obtained under auspices much less favorable than the present; their every effort on the ear was hampered by recurring catarrhal inflammations, which today we can in a great measure control.

204 EAST JEFFERSON STREET.

A STUDY OF THE PATHOGENESIS OF GOUT.¹

By MARY CLAYTON, M. D., Buffalo, N. Y.

THAT gout is due to a vice of metabolism, associated with an excess of uric acid in the blood, almost all observers agree, but, as our greatest American authority says, "the rest is theory awaiting confirmation or refutation."

It is this transitional state of the theories as to the causation of gout which led me to select this subject, feeling that a résumé of the most important conclusions reached by recent scientific investigators might not be amiss at this time.

1. Read at the semi-annual meeting of the Medical Society of the County of Erie, June 13, 1899.

About the year of the American war for independence uric acid, which was to cause the evolution and revolution of so many pathological theories, was discovered in the urine by Scheele. Three quarters of a century later Sir Alfred Garrod, a name prominent in the history of uric acid, found it in the blood of patients suffering from gout.

Of the many hypotheses as to the pathology of gout which have been brought forward, I have thought it best to consider only two. First, the nervous theory, which is supported by Sir Dyce Duckworth. He maintains that gout is primarily dependent upon a functional disorder of the nervous system, which causes defects of nutrition, not only by undue formation of uric acid, but also by inhibition of the normal destruction of that substance and lessening of the renal excretory power.

In hereditary gout the toxemia is dependent on the inherited gouty neurosis. In acquired gout the toxemia arises from overloading of the digestive and excretory organs, which, if associated with depression of the nervous system, produces the gouty neurosis. I is quite comprehensible that the morbid blood condition, produced by faulty metabolism could affect the trophic center for joints, which is added by the advocates of this theory to the many centers already located in the medulla oblongata. Duckworth does not deny that uric acid is connected with the production of gout, but gives it a secondary place.

The following points are urged as favorable to this theory: (1) The sudden onset of the attack of acute gout, preceded by a feeling of well-being; (2) the explosive neuroses; (3) the influence of depressing circumstances, physical or mental, upon the disease; (3) the relation of gout to diabetes.

Living, Latham and Rolfe hold modifications of this theory.

There is one undeniable advantage about pathological theories which depend upon obscure, vaguely located lesions of the nervous system, viz: if they cannot be clearly proven it is almost impossible to disprove them.

In the second view of the pathogenesis of gout, which I wish to present, uric acid is regarded as the primary cause of the disease. Of course uric acid never exists in the body free, but in the form of urates.

Bruce Jones and later Sir William Roberts have demonstrated that uric acid is diblastic and forms three classes of salts: (1) neutral urates, which do not exist in the human organism and so

concern us no further at this time; (2) biurates, in which a metal replaces half the displaceable H; (3) quadriurates, in which a metal replaces one-fourth of the displaceable H of two molecules of uric acid.

The quadriurate appears first in the blood in diseases characterised by an excess of uric acid. This salt is soluble but unstable, and after being in the circulation for a varying length of time, the sodium quadriurate unites with some of the sodium carbonate of the blood to form sodium biurates,—a stable but insoluble salt.

The presence of uric acid in the blood in health is affirmed by Halburton, Hammarstein, Watson, Haig and others. It is denied by Garrod, Klemperer, and after original experimentation by Luff. As to the formation of uric acid, Garrod holds that it is normally produced in the kidneys and when in disease it appears in the blood, it is due to reabsorption from these organs.

Hammarstein believes that uric acid originates chiefly from the nuclein of destroyed leucocytes and therefore it is relatively increased in the newborn, after a meal of proteids, in leucocytosis and leucemia, and by drugs which increase the number of leucocytes.

Sir William Roberts suggests that as uric acid is not needed as a vehicle for the elimination of proteids, urea having taken its place in name, perhaps it is one of the vestigial remains. It is pleasant to think that in the far future it will be unnecessary for the followers of Esculapius to wrestle with the problems connected with uric acid, as according to this view of the case evolution will have settled them.

The two books on my subject which are the most widely read are, I think, those of Haig and Luff. I have tried to give in comparison the most important conclusions reached by these authors as they are generally opposed and give different aspects of the subject. Haig's views are very hard to extract from his rambling book, in which his personal sensations occupy such a large place. Many of his conclusions are based upon insufficient premises. He uses a notoriously inaccurate test for uric acid, which throws discredit upon some of his most important theories. If his views as to pathology were accepted in toto the expression uric acid diathesis would be as much abused as the word idiopathic used to be.

Luff's book is condensed and systematic and from the side of theoretical chemistry he makes out a very good case for his theory. According to Haig some of the uric acid is introduced ready formed in the food and is absorbed unchanged into the blood. Uric acid is also formed from the nitrogen of food and in this process the final

stage occurs in the kidneys. The greater quantity of uric acid from these two sources is eliminated by the kidneys, but a small residue is carried over by the renal vein into the general circulation, where it is attracted differently by various organs, which tends to be rendered less soluble and is held back in the liver, spleen and certain fibrous tissues, especially those of the joints, probably because these tissues are less alkaline than the rest of the body. This retained uric acid is dissolved when the alkalinity of the blood is increased and passes into the circulation, where it causes headache, slow, high tension pulse, and the like. When an acid is given or the alkalinity of the blood lowered in any way Haig believes that the headache, etc., are relieved because the uric acid is thrown out of the circulation and driven into the joints, where it causes pricking pains. Haig holds that there is a constant relation of uric acid to urea, eliminated by the kidneys of about 1-35, and upon this fact he bases much of his theory. Just as competent observers, however, have found vastly different proportions between these two substances, and it has come to be generally believed that their ratio varies in different individuals.

Another important tenet of his faith is that the alkalinity of the blood varies inversely as the acidity of the urine, and that acid introduced in food or wine reduces the alkalinity of the blood, drives the uric acid into the joints and produces an attack of acute gout.

Luff's experiments on the other hand, seem to prove that the alkalinity of the blood is not greatly reduced in gout and that increased alkalinity does not make the blood a better solvent for uric acid deposited in the form of sodium biurate, which he considers the *materies morbi* in gout. There is no relation he claims between the alkalinity of the blood and the acidity of the urine.

Haig believes that it is the retention of the quadriurate, probably in the colloid form, which causes all the evils which he attributes to uric acid, except the chronic arthritis of gout and rheumatism.

Sir Wm. Roberts argues that there is no direct proof that uric acid is a toxic agent and though on the eve of an outbreak of acute gout the fluids of the body must be impregnated with it, there are no signs of poisoning. Also in leucocythemia and severe anemia the blood is frequently charged with sodium quadriurate without the production of toxic symptoms referable to this cause. This argument, it seems to me, rather disposes of the retention theory.

The following is a synopsis of Luff's theory as to pathology of gout. Uric acid is not present in the blood in health. It is formed normally in the kidneys, probably from the conjunction of urea and

glycoceine. At first the uric acid is in the form of the quadriurates of sodium, potassium and ammonium, which are normally excreted in the urine. In Luff's estimation gout is always preceded by some functional or organic affection of the kidneys, which interferes with the excretion of uric acid, and its presence in the blood in gout is due to deficient excretion and reabsorption of the three quadriurates mentioned above. These are soon transformed by union with some of the sodium carbonate of the blood into sodium quadriurate. This substance is not toxic, but after circulating in the blood a certain length of time, varying from hours to days, it is converted into sodium biurate, which being insoluble is deposited in the crystalline form in tissues which are especially predisposed to its deposition, either from having received previous slight injuries or because of their poor vascular supply. Here it acts as a foreign body and sets up irritation and inflammation. Visceral neuroses, thrombosis, and the like, may also be explained by the precipitation of minute crystals of sodium biurate, either in the substance of the organ or in the blood itself. The biurate may deposit so slowly and quietly that no acute symptoms are noticed, but this is unusual, the deposition being usually accompanied by pain and the symptoms of inflammation.

The kidney affection associated with gout may be functional and disappear if the exciting cause is removed, or become organic, in which case the epithelium of the convoluted tubules is affected and the granular or cirrhotic kidney results. Liability to this functional kidney affection constitutes the hereditary factor of gout.

In severe anemia and other blood disorders uric acid is formed within the system from the nuclein of the leucocytes, but in this case the kidneys are sound and rapidly eliminate the uric acid. Thus does Luff bridge across the two horns of the dilemma and gain a secure foundation for his theory.

In lead poisoning both these causes are in operation and the uric acid which is found in the blood is due to the renal condition induced by the disease, and to the leucocytosis of the accompanying anemia.

These various pathological theories lead to different plans of treatment for gout. Haig's panacea is a vegetable diet, because he believes that animal food increases the introduction and formation of uric acid and by causing high acidity prevents free elimination of this substance. The alkaloids of tea, coffee and cocoa act in the same way. Wines by their acidity drive the uric acid from the blood into the joints and so cause an attack of acute gout. He believes

the diet should consist of milk, cheese, pulses, bread, corn foods, garden vegetables and fruits.

As to drugs Haig holds that colchicum relieves acute gout by increasing the alkalinity of the blood and thus facilitating the solution and excretion of uric acid. Mercury, lead and zinc form insoluble compounds with uric acid and in his graphic words drive it out of the blood and into the joints. The alkalies and salicylates, phosphate of sodium, piperazin and belladonna increase the excretion of uric acid.

Luff's laboratory experiments with artificial blood serum have demonstrated to his satisfaction that a nitrogenous diet does not necessarily produce an excess of uric acid in the system, as increased elimination may compensate for increased intake. He believes that diminution of the alkalinity of the blood, which could be produced by food could not effect its solvent powers for uric acid or the precipitation of sodium biurate. The evil effects of wines are not due to their acidity, but to their effect on the metabolism of the liver, causing more glycoceine to go to the kidney. Sodium chloride hastens the formation and precipitation of sodium biurate and diminishes its solubility.

It is possible that the mineral constituents of meat may diminish the solvency of sodium biurate. The mineral constituents of milk have no effect on the solvency of this substance and those of vegetables increase its solubility and delay the change from the quadriurate to the biurate. The vegetables he has found to be most active in this respect are spinach, Brussel sprouts, French beans, cabbage, turnips and celery. Luff, therefore advocates a rational mixed diet including plenty of these vegetables and a table salt composed of their mineral constituents. As to drugs his experiments show positive and sometimes startling results, but his treatment is very much like that advised by others, though he often explains the action of his remedies in an original manner. The salicylates he unqualifiedly condemns, as they bring an increased amount of glycoceine to the kidneys, which are already incapable of eliminating the normal amount of uric acid.

83 NORWOOD AVENUE.

A ST. PETERSBURG (*Lancet Clinic; Med. Times*) physician finds that the application of an ointment of ten parts of ichthylol and eighty parts of lanoline prevents pustulation and abbreviates the cutaneous manifestations in small-pox.

SLIPPING OF THE INTRAPERITONEAL LIGATURE.

By R. STANSBURY SUTTON, M. D., Pittsburgh, Pa.

THE cause of the slipping of a ligature placed upon an exposed vessel is always due either to a careless application of the ligature, or to a giving way of the knot or both. The careless application of the ligature is not pardonable. The giving way of the knot, on a silk ligature, properly applied, I have never seen. When the ligature is one of catgut, however carefully it is applied to a vessel within the peritoneal cavity, the knot may slip. For this reason, for intraperitoneal ligation of several bloodvessels I prefer and use silk. But notwithstanding the reliability of the knot, on a properly tied silk ligature, when the ligation of tissue is effected en masse, the ligature will occasionally slip off the mass; or more properly expressed, a portion of the constricted mass, and notably that portion containing the artery, will retract from the embrace of the ligature and hemorrhage into the peritoneal cavity will ensue. In order to avoid this accident after abdominal section Professor Billroth, before applying a ligature en masse, applied with full force a pair of heavy clamp forceps and in the groove of crushed tissue tied the ligature. Where I have followed this example the ligature has never slipped. The treatment of hemorrhoids by crushing was established twenty years ago by Allingham and has stood the test of time. The fact that a crushed bloodvessel does not bleed was established for all, by such accidents as occur daily in railroad wrecks and rolling mills. The surgeon observed the fact and applied the deduced principle of crushing tissue to prevent bleeding to his art. The hemostatic forceps of Peán, the heavy clamp forceps of Billroth, the hemorrhoid crusher of Allingham, and the recently devised crusher of Doyen, are all efforts to apply systematically to surgery, the fact taught us by crushing accidents.

In my first 492 intraperitoneal operations, I encountered two cases of slipped ligature. The pedicles in both were short and thick and I neglected to crush a groove for the ligature. In both cases the collapse was profound and my own action was immediate in both cases. While ether was being given I reopened the abdominal wound, secured the bleeding vessel, and washed the lost blood and clots out of the cavity and reclosed the wound. I did one case by candle light, and immediately afterward transfused the patient. Both cases recovered, one occurring in January, 1895, and one a few months ago. In addition to these two cases of my own, I

know of six other cases, which have occurred in the hands of four other operators in this city, and not one of the six cases was saved. All died. Tying tissue en masse is not surgical, and as time goes on I endeavor more and more to avoid it. Short pedicles in instances of salpingo-oophorectomy are not infrequent, and it is better surgery to tie the ovarian artery at the big infundibulum pelvicum, and the uterine below the cornual extremity of the Fallopian tube and to strip out the tube and ovary entirely from the ligamentum latum, closing the open edge of the latter with a catgut suture.

The conical, retracting stump is avoided; all tension is obviated, and the removal of the ovary and tubes more complete. Tying en masse is avoided, and secondary hemorrhage will not occur. Doyen's instrument will serve a useful purpose in all cases where it is not possible to safely secure vessels with the ligature. It is a very formidable looking affair, but well constructed and practical. But the convenience of an instrument so useful and convenient should not tempt operators to use it to the exclusion of sound surgical methods found to be reliable in their experience. Discarding the temptation to ligate en masse, and keeping before us the facts relative to the retraction of constricted tissues, the constantly receding resistance beyond the ligature, and the importance of leaving a good stump, we will avoid the dangers of secondary hemorrhage by observing greater care in the application of ligatures. Where it is desirable the application of a pair of heavy clamp forceps will prepare a bed for the ligature, or Doyen's instrument may be applied perfectly and the ligature may be discarded.

516 MARKET STREET.

Society Proceedings.

REPORT OF THE COMMITTEE ON MINIMUM STANDARDS FOR ADMISSION TO MEDICAL COLLEGES.

AT THE last annual meeting of the National Confederation of State Medical Examining and Licensing Boards, held at Columbus, O., June 5, 1899, the following report was submitted by a special committee that had considered the subject for three years :

Mr. President and Gentlemen of the Confederation :

Your committee, appointed by the President of the National Confederation of State Medical Examining and Licensing Boards,

have labored assiduously to inform themselves of the true status of the requirements now in force in the several states, and to obtain the views of members of boards upon the same, and now desire to submit the following report as the result of their labors :

In December, 1897, a letter was prepared and sent to the boards of the several states and territories, for the purpose of ascertaining, as far as possible, the branches in which they believed students should be examined for admission to medical colleges, and the extent of such examinations. Letters were also sent to a number of practical and well-known educators. A large number of replies, embodying very valuable suggestions, were received. Some of these had been acted on in a formal way by boards, others were over the signatures of the secretaries. A large majority of them favored a high standard—much higher than would be possible or even practicable at the present time. By the aid of such information, we hope the committee may be enabled to make a report that may prove in a degree acceptable. We desire to extend our sincere thanks to all who have responded so courteously to our request for information.

In the letter sent to the boards we also requested that they furnish all the information upon this subject embodied in their laws and in the rulings of their respective boards. The commissioners and superintendents of public instruction of a large number of the states were written to, requesting them to forward to the committee the official reports of their departments. The object in obtaining this latter information was to determine, if possible, what class of schools of the higher grade existed in the greatest number in the several states.

In the preliminary report made to the Confederation at Philadelphia, attention was called to the discrepancy in the requirements of the high schools in the several states. Therefore, it is unnecessary to enter into the subject more fully, as the statements then set forth have been verified by more recent research. However, we may be pardoned for inviting attention to the great disparity that now exists in the requirements made by the Association of American Medical Colleges, by the Southern Medical College Association, by the National Confederation of Eclectic Medical Colleges, by the Inter-Collegiate Committee of the American Institute of Homeopathy, by Physio-Medical Colleges, by the states whose minimum requirement is regulated by law, and by those states in which state boards of medical examiners are empowered to adopt rules regulating such requirements. In comparing these we will first call your attention to the

ASSOCIATION OF AMERICAN MEDICAL COLLEGES.

This association requires an examination in English, arithmetic, algebra, physics and Latin, the minimum of which shall be as follows :

"ARTICLE III.—EXTENT OF THE EXAMINATION.

1. English—A composition on some subject of general interest. This composition must be written by the student at the time of the examination and should contain at least 200 words. It should be criticised in relation to thought, construction, punctuation, spelling and handwriting.

2. Arithmetic—Such questions as will show a thorough knowledge of common and decimal fractions, compound numbers, and ratio and proportion.

3. Algebra—Such questions as will bring out the student's knowledge of the fundamental operations, factoring and simple quadratic equations.

4. Physics—Such questions as will discover the student's understanding of the elements of mechanics, hydrostatics, hydraulics, optics and acoustics.

5. Latin—An examination upon such elementary work as the student may offer, showing a familiarity usually attained by one year of study; for example, the reading of the first fifteen chapters of Cesar's commentaries, and the translation into Latin of easy English sentences involving the same vocabulary.

Sec. 2. In place of this examination, or any part of it, colleges, members of this association, are at liberty to recognise the official certificates of reputable literary and scientific colleges, academies, high schools, and normal schools, and also the medical student's certificate, issued by any state examining board covering the work of the foregoing entrance examination.

Sec. 3. Colleges, members of this association, may allow students *who fail in one or more branches* in this entrance examination the privilege of entering the first-year course, but such students shall not be allowed to begin the second course until the entrance requirements are satisfied.

Sec. 6. Colleges, members of this association, are free to give to students who have met the entrance requirements of the association additional *credit for time* on the four years' course as follows : (a) To students having the A. B., B. S., or equivalent *degree* from reputable literary colleges, one year of time. (b) To graduates and students of colleges, of *homeopathic* or *eclectic* medicine, as many years

as they have attended those colleges, provided they have met the previous requirements of the association and they pass an examination in materia medica and therapeutics. (c) To graduates of reputable colleges of *dentistry, pharmacy and veterinary medicine*, one year of time."

THE SOUTHERN MEDICAL COLLEGE ASSOCIATION

requires that every student applying for matriculation must possess the following qualifications: "He must hold a certificate as the pupil, of some known, reputable physician, showing his moral character and general fitness to enter upon the study of medicine. He must possess a diploma of graduation from some literary or scientific institution of learning, or a certificate from some legally constituted high school, general superintendent of state education, or superintendent of some county board of public education, attesting the fact that he is possessed of at least the educational attainments required of second grade teachers of public schools; provided, however, that if a student so applying is unable to furnish the above and foregoing evidence of literary qualifications, he may be permitted to matriculate and receive medical instruction as other students, qualify himself in the required literary departments, and stand his required examination, as above specified, prior to offering himself for a second course of lectures. The foregoing certificate of educational qualifications attested by the dean of the medical college attended, together with a set of tickets showing that the holder has attended one full course of medical lectures, shall be essential to attendance upon a second course of lectures in any college belonging to the Southern Medical College Association."

THE INTER-COLLEGIATE COMMITTEE OF THE AMERICAN INSTITUTE OF HOMEOPATHY

requires that no person, unless he present a diploma or certificate of graduation from an accredited university, college, academy, or high school, or a teacher's certificate, which shall be approved by the faculty as equivalent to the examinations required, shall be admitted to the second year of study, and the first course of lectures, in any of the colleges represented in this committee, without having passed a written examination upon the following subjects:

1. English composition—By writing at the time of examination, an essay of not less than 200 words, from which may be judged the writer's proficiency in grammar, spelling and writing.
2. Arithmetic—As far as square root.

3. Geography—Physical and political, as much as is contained in advanced school geographies.

4. History—Such an outline of the history of modern civilised nations, especially of the United States, as is contained in ordinary manuals of history.

5. Latin—Sufficient to read easy prose and give a fair comprehension of scientific terms and formulæ.

6. Physics—Such as is comprised in Balfour Stewart's Primer of Physics.

7. Biology and physiology—As much as is comprised in the briefer course of Martin's Human Body.

8. Chemistry—As comprised in Miller's Elementary Chemistry.

9. Botany—As found in an elementary manual.

It shall be understood that the first of these four years of study shall have been devoted to the preliminary medical studies, as outlined by this committee, and that upon successfully passing the above examination, the student shall have fulfilled the requirements of the first year of medical study."

THE NATIONAL CONFEDERATION OF ECLECTIC MEDICAL COLLEGES

demands that the preliminary requirements shall be: "1. Credible certificate of good moral standing. 2. A good English education to be attested by: (a) first grade teacher's certificate, or (b) a diploma from a graded high school, or literary or scientific college or university, or (c) evidence of having passed the matriculation examination to a recognised literary or scientific college, or (d) New York regent's medical student's certificate. 3. Also an elementary knowledge of natural history, or physics and Latin.

Advanced Standing.—(a) Graduates of reputable and regularly established colleges of dentistry, colleges of pharmacy, colleges of veterinary medicine, which require as a condition of graduation, attendance on a course extending through three or more full years, may be allowed one year's standing on a four years' medical course only on condition that they comply with the entrance requirements of the medical college, and pass all the examinations and perform all the laboratory work embraced in the course of the freshman year. (b) Graduates of colleges of arts and sciences which require a regular attendance of three or more years as an essential to graduation, may be admitted to the second year of the medical course without examination."

THE PHYSIO-MEDICAL COLLEGES

of Chicago, Ill., viz., Chicago Physio-Medical College and the College of Medicine and Surgery, have adopted as the preliminary educational requirements those of the Illinois State Board of Health relating to the same, which reads as follows: "1. Each applicant must present to the faculty of the college: First. Credible certificate of good moral character, signed by two physicians of good standing in the state in which the applicant last resided. Second. (1) A diploma or certificate of graduation from a high school, or (2) evidence of having passed the matriculation examination of a recognised literary or scientific college; or (3) a certificate of having successfully passed the medical student's examination conducted by the examiner, or by the faculty of a recognised literary or scientific college or university, (not members of a medical college faculty) or by the state superintendent of public instruction, or by a principal of a high school, in the following-named branches, in each of which the applicant should possess, at least, the knowledge required at the completion of one year of study in such a school, viz.: English grammar, arithmetic, elementary physics, United States history, geography and Latin. One year is allowable in which to make up defects in knowledge of Latin, but the student must be provided with a certificate of proficiency in this branch of learning from the *designated authorities* before he can be accepted as a second course student, or be given a certificate of attendance on the first year's course. Graduates of reputable and regularly established colleges of dentistry, colleges of pharmacy, colleges of veterinary medicine, which require as a condition of graduation attendance on a course extending through two or more full years, may be allowed one year's advanced standing on a four-year medical course only on condition that they comply with the entrance requirements of the medical college, and pass all the examinations and perform all the laboratory work embraced in the course of the freshman year. Graduates of colleges of arts or science which require a regular attendance of three or more years as an essential to graduation, may be admitted to second year of the medical course without examination, provided: "First, that they furnish beside their diploma or certificate of graduation, formal and satisfactory evidence of having credibly done at least one year's full work in the following-named branches, for which they may receive credit in the medical school without examination: (1) chemistry, (2) biology or comparative anatomy, (3) histology, (4) embryology, (5) experimental physics, (6) physiological botany, (7)

laboratory physiology or experimental physiology, (8) zoology. And, second, that they make up their other deficiencies in the first year's work at attendance and examination, the same as other students."

THE PHYSIO-MEDICAL COLLEGE OF INDIANA

requires that an applicant desiring to enter that college furnish: "1. A certificate of good moral character, signed by two physicians of good standing in the state from which he comes. (2) The presentation of a diploma or certificate of graduation from a literary or scientific college or high school; or a certificate of successful equivalent examination by the faculty by any reputable university or college, or by the state superintendent of public instruction, or a medical student's certificate, issued by any state examining board. One year will be allowed to correct defects in the knowledge of Latin, but students must be provided with a certificate of proficiency in this subject, from designated authorities, before he can be accepted as a second course student."

THE BOARD OF REGENTS OF THE UNIVERSITY OF THE STATE OF NEW YORK now demands as a minimum requirement the completion of satisfactory work for four years in a registered high school or its equivalent; or it grants a certificate to a student who may attain 48 counts or their equivalent by examination in the following branches: advanced English, German two years, arithmetic, rhetoric, botany, physical geography, geography, civics, economics, writing, plane geometry, Roman history, spelling, English composition, physiology, hygiene, English literature, algebra, United States history, New York history, American literature, Latin, one year, physics, first part, English history and drawing.

THE MEDICAL COUNCIL OF THE STATE OF PENNSYLVANIA

requires as a minimum standard that the applicant shall possess "the diploma of a college, diploma of an academy, seminary, normal school, or high school, or a teacher's permanent certificate, or a student's certificate of examination for admission to the freshman class in a literary college," or pass an examination in the following branches: "Arithmetic, grammar, geography, orthography, American history and English composition.

EXTENT OF THE EXAMINATION.

Arithmetic—Embracing notations, numerations, fundamental rules, multiples, factors, fractions, both common and decimal, ratio and

proportion, percentage, denominate numbers, including metric system mensuration, square and cube root.

Grammar—Embracing the use of capitals, rules for punctuation, parts of speech, declensions, the formation of plurals and possessives, distinction of gender, comparison, classification and properties of verbs, elementary knowledge of the syntax of words, and analysis of easy sentences.

Geography—Including the outlines of mathematical, statistical, political, with some of the elements of physical, the political divisions, routes of commerce and travel, staple productions of the different sections of the United States.

Orthography—Such words as are commonly used in current literature.

American history—Geography of North America, the early discoverers, the character and mode of life of the natives; our forms of government from colonial times to the present, embracing the period of the Revolution, Declaration of Independence, Federal Constitution, successive administrations, with important events under each; general principles of civil government, civil war and general development. Special attention given to the history of Pennsylvania.

English composition—A general knowledge of the varieties in both prose and poetry.

Sentence—Embracing capitalisation, punctuation, grammatical classification according to form and use, words into phrases, phrases into clauses.

Paragraph—Uses of the paragraph, requisites in its construction, combination of miscellaneous sentences into paragraphs.

Prose composition—Embracing common business forms and the principal varieties of letter-writing, transformation of poetry into prose.

Theme—Its form or outline, introduction, discussion, conclusion, its kind, narrative, descriptive, persuasive, or argumentative."

THE STATE BOARD OF MEDICAL EXAMINERS OF NEW JERSEY

requires as a minimum standard that "candidates must be graduates from an accredited literary or scientific college, or have completed satisfactorily not less than a three years' course in an accredited high school or academy, or have received a preparatory education covering the following branches, viz.: orthography, arithmetic, English grammar and composition, geography, history of the United States, algebra and physics, or what the board may consider their

equivalents. Applicants unable to present to the board credentials covering the above-named branches may take a special examination before the State Superintendent of Public Instructions of New Jersey, whose certificate is accepted by the board."

We might go on until we had enumerated the requirements of all the states having laws regulating the practice of medicine, and yet we would be unable to find even two of them that have exactly the same minimum requirements. It must be evident to the mind of any one, from the foregoing, that there is an urgent necessity that some uniform standard should be adopted, in justice to the medical colleges and students of the United States, and in order to enable the examining boards of the several states to perform their duties more efficiently and with fewer difficulties. Medical colleges are kept in a state of unrest and bewilderment by an endeavor to comply with the requirements of the various states governing the reception of students. Some states have laws clearly defining the minimum requirements for medical students; others have given their state boards a limited authority in making such definitions; others, again, have conferred no such power, except that which the boards may assume under the general provisions of the law. States having a minimum requirement prescribed by law cannot be expected to adopt a standard lower than that which they now enjoy, neither have the boards power to change such standards. Therefore, in order that they can join the Confederation in adopting a uniform minimum standard, it will be necessary to bring the requirements of the states having low requirements up to those having the highest, or to adopt a standard requirement, and let the states which have no power in this direction under existing laws enforce the standard adopted by the Confederation as far as they can; and endeavor by future legislation to cure the defect. It is only by such means that a uniform minimum standard can ever be adopted. It will bring no confusion to the states that cannot at once enforce such a requirement, but it will enable boards of those states to understand what is required, and to endeavor by all just methods to bring their requirements up to the standard.

Educational qualifications for entrance to medical colleges must be essentially uniform, in order that the technical courses of study builded upon them may also conform to each other. In no other way does it seem possible to establish that educational reciprocity, which is believed to be desired by all the states. A cogent reason why this body should take some definite action is that while the

Association of American Medical Colleges, the Southern Medical College Association, the Inter-Collegiate Committee of the American Institute of Homeopathy and the National Confederation of Eclectic Medical Colleges have done much to elevate and unify medical education, they do not enroll on their lists all the colleges of the United States; moreover, neither association has any legal power to enforce its requirements, whereas the National Confederation is composed of state boards, authorised and supported by law, and can therefore enforce their requirements uniformly and efficiently.

In spite of certain objections, which have been heretofore indicated, the committee has adopted as a minimum standard the four years' course in the high school. Having made this selection of a standard it is only reasonable that certain facts to substantiate the choice should be embodied in this report. The high school is found equably distributed over all the states and territories; furthermore, being maintained by public funds, it is enabled to furnish the best possible facilities and equipment free of charge to all our youth, whereas a college education can be enjoyed by few other than the more prosperous in the communities. Statistics are dry, but their argument is here convincing.

FIRST, AS TO THE AVAILABILITY OF HIGH SCHOOL ADVANTAGES ;
we find that in 1897 there were 7,209 schools of this grade in the United States, having 584,900 scholars.

SECOND, AS TO THE DEMAND FOR AND DEVELOPMENT OF SUCH SCHOOLS ;

the commissioner of education reports that from 1889-90 to 1896-97 the increase of students was about 219,000, being in public high schools 102 *per cent.*, and in private high schools 13 *per cent.* With the same ratio of increase a conservative estimate would place the attendance in 1899 a little short of 700,000.

THIRD, AS TO DISTRIBUTION AND ATTENDANCE ;

let us consider the statistics of the public high schools in 1896-97. The states here mentioned have been taken from the North Atlantic, South Atlantic, North Central, South Central and Western divisions of the country to show that under widely differing conditions there exists a remarkable uniformity in attendance, irrespective of large centers of population, or the occupation of the people. In the United States, with a population of 71,374,142 and 7,209 high schools, the attendance was 8.19 per thousand.

	Population.	Number of Schools.	Total Attendance.	Attendance per Thousand.
In New York	6,851,000	548	57,067	8.33
" Oregon	378,800	30	3,015	7.96
" Pennsylvania	6,070,000	388	36,279	5.98
" Texas	2,979,000	261	17,684	5.93
" Massachusetts	2,634,000	322	37,641	14.29
" Iowa	2,101,000	370	30,698	14.61
" Ohio	3,834,000	642	47,415	12.37
" Nebraska	1,131,000	234	14,233	12.58
" Maryland	1,179,000	84	6,191	5.25
" Arizona	80,650	4	449	5.54

FOURTH, AS TO BRANCHES TAUGHT ;

we find a striking uniformity and a broad range in the courses of study, which include Latin, Greek, French, German, algebra, geometry, physics, chemistry, geology, physical geography, psychology, rhetoric, physiology and history. To show that these opportunities are utilised, allow me to give the number of scholars pursuing some of these branches: Latin, 248,250; German, 71,150; algebra, 280,358; geometry, 135,668; physics, 107,993; chemistry, 47,461; physical geography, 127,398; physiology, 155,000; rhetoric, 174,650; history, 186,580.

FIFTH, AS TO THE LENGTH OF COURSE ;

it is found that four years obtain in most of the high schools. Complete uniformity is yet to be attained, though each year shows a rapid advance toward such consummation. The National Educational Association, composed of prominent educators in our public schools, has done a grand work in its efforts to elevate the standard of our high schools, and make them uniform in scope and length of course. The aim of the association is to make the high school course a recognised unit of value in entrance qualifications to literary and scientific colleges. Thus we find another reason for adopting a standard which is in harmony with existing educational reforms; and, by such action, materially assist in their attainment. The records show that in 1897, 80,180 high school students were pursuing courses preparatory to entering scientific and literary colleges. In this same year the graduates from high schools numbered 61,814, of whom 20,152, or 32.6 *per cent.* were prepared for college. The work of the National Educational Association is commendable to the highest degree; and, should their efforts continue as effective as they have proved for some years past, we may ere long behold

the pleasing spectacle of all graduates leaving the high school fully equipped to enter the portals of the best colleges in the land. •

Your committee would therefore recommend : That, as far as it be vested in the discretion of the State Examining and Licensing Boards, the rule be enforced that any college to be considered in good standing must demand as a minimum entrance requirement that the applicant possesses a high school diploma or certificate issued after a four years' course of study, or attains a satisfactory grade (75 per cent.) upon examination in the following branches, to-wit : Orthography, English grammar, English composition, geography, rhetoric, Latin, arithmetic, algebra, geometry, physics, botany, zoology and United States history. Such examination to be conducted under the direction of the state board having the authority, by certified examiners, none of whom shall be either directly or indirectly connected with a medical college.

THE EXTENT OF THE EXAMINATION.

1. Orthography—A sufficient number of words and of such character as will be a thorough test.

2. English grammar—Embracing the parts of speech, rules of punctuation, the formation of plural and possessive, distinction of gender, classification and properties of verbs, and analysis of sentences.

3. English composition—Two compositions of not less than 200 words each. . One subject to be assigned and the other subject to be elective. The compositions to be written by the student at the time of the examination. They should be criticised in relation to thought, construction, punctuation, capitalisation and handwriting.

4. Geography—Including some elements of physical geography, the political divisions, routes of commerce and travel, staple productions and population of the different countries.

5. Rhetoric—Rules and uses of rhetorical figures.

6. Latin (two years). The examination showing the ability of the student to translate and parse the construction of easy Latin prose, together with the expression in Latin of English sentences, such as would indicate two years of study.

7. Arithmetic—Such questions should be submitted as will show a clear knowledge of decimal fractions, percentage, compound numbers and square root.

8. Algebra—Through quadratics.

9. Plane geometry.

10. Physics—The questions to include the elements of mechanics, hydrostatics, hydraulics, heat, electricity and especially of optics and acoustics.

11. Botany—Embracing the structures of plants and the principles of their classification.

12. Zoology—Embracing the general divisions of animal life, with the distinctive conformations and habitat of each.

13. United States history—Boundaries and possessions of the United States, history of the early discoveries, by whom and dates, mode of life of the natives; form of government from Colonial times down to the present; various wars from the Revolution down to the present, causes of same; conditions that led to the Declaration of Independence; Federal Constitution, form of government, various administrations, dates of the most important events under each administration, growth and wealth. Candidates deficient in *one subject* may be admitted with a condition in that subject, which must be removed before the beginning of the second year.

In lieu of the foregoing credentials, medical colleges may accept (a) a diploma from a reputable college granting the degree of A.B., B.S., or equivalent degree; (b) a diploma from a normal school or seminary, legally constituted, issued after four years of study; (c) an official certificate of a reputable literary or scientific school, setting forth that the holder has satisfactorily pursued the studies indicated in the foregoing examination; (d) a teacher's permanent or life certificate; (e) a medical student's certificate of examination for admission to the freshman class of a reputable literary or scientific college.

One year's advance standing may be granted a student who has received the degree of A.B., B.S., or equivalent degree from a reputable literary or scientific school; provided, however, that the applicant for such standing undergoes a satisfactory examination upon every branch included in the first year's curriculum of the college to be entered. This rule to go into effect July 1, 1903.

FORM OF CERTIFICATE ON EXAMINATION.

In order that the foregoing rule may be enforced, your committee would suggest that those having in charge the examination of students desiring to enter medical colleges be required to issue a certificate to the applicant bearing the name, age and residence of said applicant, place and date of examination, grade obtained in each branch, and signed by the person or persons holding the

examination, with their official positions. This or other certificates of educational qualifications shall be presented by the student to the registrar, secretary, dean or other officer of the medical college duly authorised to admit students; and such officer shall record in a register, to be duly preserved by said college, the name, age and residence of the student, with the date, place of issuance and character of his diploma or certificate, also the date of his matriculation, and further shall record in this same register the date on which the student leaves the instructions of the college.

Upon the request of the student, the registrar, or authorised officer, shall furnish, over his signature and seal of the college, a certificate stating the name, age and residence of the student, the time of attendance and grade attained in each study pursued while a matriculant of said college. This certificate must be presented by the student to the proper officer of any college, other than the one where the original record exists and into which admission is sought, and shall be duly filed in the records of such college, together with the date of matriculation. The student may, as before, obtain from the authorised officer of this college a certificate, over the signature of said officer and seal of the college, stating time of attendance and grade obtained in each study pursued while a matriculant of said college, together with a copy of the certificate filed upon the admission of said student. In case the student is graduated, the officer authorised by the college granting the degree shall transmit to the student a certificate, over his signature and seal of the college, stating the name, age and residence of graduate, dates of matriculation in and graduation from said college, and the grades in each study pursued while a matriculant of said college, together with a copy of any certificates from other colleges relating to said graduate. This certificate, together with the diploma, credentials or preliminary educational qualifications, affidavit, and all such papers as required by law, shall be filed with the State Board of Medical Registration or Examination of that state in which the applicant desires to engage in the practice of medicine.

In closing this report your committee would earnestly appeal to the members of the Confederation for an agreement upon some definite minimum standard. While it may seem impossible to adopt any requirement conforming to each individual opinion, let us remember that our personal preferences should not be the limit to our consideration, and that we have a real duty to perform in behalf of the profession, of the state boards, and of the 150 medical colleges

with their 24,000 students, found within our combined jurisdiction. The actual operation of such a requirement during a year or two would do more to fix the proper standard than a decade of theoretical discussion. We cannot afford to waste time over points of minor consideration, but let us bend our energies upon a united effort to establish a standard, and it can easily be amended thereafter, if experience demonstrates the necessity.

Respectfully submitted,

N. R. COLEMAN, Ohio, *Chairman*.

AUGUSTUS KORNDORFER, Pennsylvania.

T. J. HAPPEL, Tennessee.

GARDNER T. SWARTS, Rhode Island.

WILLIAM R. TIPTON, New Mexico.

The report was received, debated and adopted as a recommendation to the medical colleges in the United States.

BUFFALO ACADEMY OF MEDICINE.

REPORTED BY THOMAS F. DWYER, M. D., Secretary.

THE quarterly meeting was held at the Academy parlors, Palace Arcade, Tuesday evening, June 27, 1899.

In the absence of the president, Dr. MATTHEW D. MANN, the meeting was called to order at 9 o'clock p. m., by vice-president Dr. ELI H. LONG, chairman of the section of medicine.

The minutes of the last quarterly meeting and the special meeting of May 25, 1899, were read and approved. The council recommended the election of Drs. Francis E. Fronczak, F. J. Carr, Max Keiser, Irving P. Lyon, for resident membership and Dr. E. H. Ballou, Gardenville, N. Y., and Dr. Thomas J. McBlain, Niagara Falls, N. Y., for non-resident membership. They were separately ballotted for and elected Fellows of the Academy. The section of obstetrics and gynecology made provision to entertain the Academy with a paper by Dr. William P. Spratling, Craig Colony, Sonyea, N. Y., but the doctor at a late hour telegraphed the secretary his regrets that an important meeting of the board of managers of that institution prevented his being present.

Officers of the Buffalo Academy of Medicine, session 1899-1900: President, Matthew D. Mann; secretary, Thomas F. Dwyer; treasurer, Eugene A. Smith; trustees, Stephen Y. Howell, three

years; Benjamin G. Long, two years; Marcel Hartwig, one year. Section of Medicine, chairman, Eli H. Long; secretary, J. C. Clemesha. Section of Surgery, chairman, J. Henry Dowd; secretary, Marshall Clinton. Section of obstetrics and gynecology, chairman, Henry D. Ingraham; secretary, Albert J. Colton. Section of pathology, chairman, Arthur G. Bennett; secretary, Frederick H. Millener. Council, the above officers and the president of the Academy of the previous year, Dr. Roswell Park.

The attendance at this meeting was 20 and it adjourned at 9.45 p. m.

Progress in Medical Science.

PEDIATRICS.

REPORTED BY MAUD J. FRYE, M. D.

THE OXYURIS VERMICULARIS IN CHILDREN.

STILL (*British Med. Jour.*, April 15, 1899,) summarises his article, based on 200 necropsies on children under the age of twelve as follows:

1. The vermiform appendix is a common habitat of oxyuris vermicularis in childhood.

2. The generally accepted view that every single ovum of oxyuris vermicularis must be swallowed before it can be hatched is open to doubt, and there is a strong probability that the appendix vermiformis serves in some cases as a breeding place for threadworms.

3. The presence of threadworms in the appendix may cause a catarrhal condition therein, as shown post mortem, by a swollen appearance, due to thickening of its walls.

4. This swollen condition of the appendix, due to threadworms, is associated in some cases with pain in the right iliac fossa, which may simulate ordinary appendicitis.

5. In the treatment of threadworms large injections must be used, and in view of the difficulty of dislodging the worms from the appendix, and their possible presence in the small intestine, the injections should be combined with the administration of drugs by the mouth.

DIABETES MELLITUS IN CHILDREN.

TOWNSEND (*Boston Med. and Surg. Jour.*, May 11, 1899,) reports five cases of diabetes mellitus occurring in children under ten years of age and all terminating fatally, some with, some without treatment.

He notes the extreme rarity of the disease in childhood; the Massachusetts General Hospital in seventy-four years records 172 cases, in all of which only three were under ten years of age. Diabetes mellitus in infants is to be distinguished from the temporary glycosuria, which is sometimes seen in infants as the result of digestive disturbance and is not of serious import. He summarises the general picture of diabetes mellitus, as seen in children as follows:

The initial symptoms are apt to be incontinence of urine, due to polyuria; nervous irritability, great thirst. Strength, flesh and color may sometimes be retained until nearly the end. A gain of weight and height even may occur without any amelioration of the disease. The disease goes on to a fatal issue much more rapidly in children than in adults, the duration in my cases varying from two to fourteen months. Death is generally preceded by coma.

MEDICINE, PATHOLOGY AND THERAPEUTICS.

CONDUCTED BY ALBERT T. LYTLE, M. D., Buffalo, N. Y.

AUTOINTOXICATION IN EPILEPSY.

WEBER, L. W., (*Munch. Med. Woch.*, June 28, 1898,) in a paper on The significance of autointoxication in epilepsy, says that post mortem findings in cases dying in status epilepticus shows degeneration of the kidneys, the liver and the heart, traces of new or old inflammation in the vessels, especially of the brain and often extravasations of blood in the brain. The clinical manifestations of these cases give indications of poisoning. He believes that there is a large excess of the products of metabolism, especially of the incomplete kinds in this disease, that the individuals afflicted are predisposed either by heredity or by acquired conditions, that treatment should be eliminative and that bromides should be a last resort.

WARBURG'S TINCTURE.

VAN MARTER, J. G., JR., of Savannah, Ga., (*Therapeutic Notes*) in a paper read before the clinical society of St. James's Dispensary, says: "Warburg's tincture should always be given as recommended by experienced practitioners in India, after a brisk purge, undiluted, in doses of half ounce, all drinks withheld, repeated in three hours, and the patient carefully rolled up in blankets to encourage the

profuse aromatic perspiration which follows. It is one of the most powerful diaphoretics known ; it is also a diuretic, a stimulant, and a purgative. I always follow its use by opium and small doses of whisky—at least never omit the opium, which I believe acts most happily.”

NUCLEIN IN THE TREATMENT OF SEPTICEMIA.

COURTNEY, WALTER, (*Medical News; Therapeutic Notes*) has tried nuclein in the treatment of patients suffering from septicemia, and the results, as shown in ten cases, were very satisfactory, only one proving fatal. He sums up his experience thus: (1) The yeast nucleinic acid should be given as soon as septic infection is suspected. Do not wait for the typical, classical symptoms as given by text-books. If delay occurs until all the symptoms of the disease are added to an abnormal increase in temperature and pulse-rate, a serious waste of most valuable time must occur; (2) the nuclein should always, in septicemia at least, be given hypodermatically if possible, in order to secure prompt action. If the 1 per cent. solution is used, at least from thirty to forty minims, undiluted, may be given every three or four hours.

HOFFMAN'S ANODYNE AS A MEDICINAL AGENT.

BARKSDALE, GEORGE E., Ph. G., (*Bi-monthly Bulletin*) writing of Hoffman's anodyne, says: "Years ago Hoffman's anodyne was prized as one of the most important of medicinal agents composing the physician's repertory, and even now it is meet to say something in defense of this most valuable preparation that has been degraded to a place in the materia medica today that is totally inadequate to its excellent qualities. As an anodyne and antispasmodic, no one who has ever used the official preparation can ever doubt the value of it; but in recent years so many unworthy compounds having the name of Hoffman's anodyne have been sold to confiding pharmacists for the official preparation by the makers of large quantities of ether, that the real spirit has been brought into disrepute, because physicians prescribing the preparation have been so often deceived by the spurious articles, that they have about arrived at the conclusion that the anodyne is of no account, and have, consequently, ceased to prescribe it. This has certainly displayed wisdom on the part of the physicians, for to continually prescribe a drug without its affording any effect is indeed very wrong. That most of the anodyne dis-

pensed is of no use whatever there can be no doubt, until now it is not an easy matter to secure a sample that will even answer to the rough test of the pharmacopeia. The gradual introduction of the commercial spirit has been so stealthy that many have not yet discovered the false, yet the pharmacopeias of this country and Great Britain have observed the substituted spirit, and have published tests to identify the true; while the British pharmacopeia omitted the preparation in its last revision, owing to the varied and uncertain composition of the spirit."

FOR THE BITES OF VERMIN.

R	Naphthol	3i.—3ii.	5.00 to 10.00.
	Ether	q. s. p. diss.	
	Menthol	gr. jv. xlvj.	0.75 to 250.
	Vaselin	3iij.	90.00.
M.	Sig.—External use.		— <i>Medical News.</i>

FOR PERTUSSIS.

R	Guaiacol		
	Eucalyptol	āā 3j.	5.00.
	Ol. olivæ, sterilised	3x.	50.00.
M.	—Inject 35 minims subcutaneously daily.		
	— <i>Central. für die Gesam. Therp.</i>		

INFECTION OF SCARLET FEVER TO SUSCEPTIBLE INDIVIDUALS.

MILLARD (*British Med. Jour.* (1966); quoted in *Phila. Med. Jour.*) shows that in 4,910 cases of scarlet fever, 158 appeared to have carried the infection to susceptible individuals even after an average isolation period of eight and a third weeks from the initial symptom. The greater proportion of the cases thus infected appeared during the first week of the return of the convalescence. The source of the infection was shared by nasal discharges, ear discharges and desquamating skin.

SUSPECTED TAPE WORM.

RUEDEL (*Deut. Med. Woch.*, July 28, 1898,) reports the case of a female child of thirteen years, who was markedly anemic, of slow onset, accompanied by loss of strength and peculiar athetoid movements and spasms of the extremities. Tonic treatment failing to relieve, tapeworm was suspected, when following the administration of anthelmintics the child passed a quantity of *tenia saginata* and subsequently improved.

GENTITO-URINARY AND SYPHILITIC DISEASES.

CONDUCTED BY BYRON H. DAGGETT, M. D., Buffalo, N. Y.

SOME OF THE CLINICAL ASPECTS OF GRANULAR KIDNEY.

WEST, SAMUEL, before the London Medical Association stated that granular kidney is a disease of more importance and exists more frequently than is generally supposed, since it is frequently unrecognised. It is often unsuspected until demonstrated by post mortem. It is found after death in other diseases which might not have resulted fatally but for the presence of granular kidney. It is often overlooked; it is often unexpectedly found; it often supplies the missing link in obscure cases. Thus it is one of the most interesting as well as one of the most important pathologic conditions. Post mortem revealed granular kidney in a large percentage of 79 cases of autopsies—excluding children under five years of age—brought to St. Bartholomew's Hospital, either dead or dying; 48 per cent. had chronic interstitial nephritis, which was the only cause of death in 16.8 per cent. This malady and its resulting lesions caused death in 21.6 per cent more, that is, it was the sole or contributing cause of death in 38.4 per cent. of these cases.

Ten per cent. of 100 fatal cases of acute pneumonia showed, upon post mortem, granular kidney. Granular kidney is a bilateral and to a great extent a symmetrical affection. The kidneys are generally reduced in size and weight, occasionally they are larger and heavier than normal. There are large as well as small granular kidneys, just as there are large and small cirrhotic livers. The granular condition of the interstitial tissue is readily noted by microscopical examination.

The typical granular kidney is small, contracted, hard, cirrhotic, nodular and the surface is often well covered with cysts. Section of the kidney shows cortical substance, infiltrated with fibroid indurations and cellular degeneration. Regarding the question of inflammation, there is no more evidence of this process in the cirrhotic kidney than there is in the cirrhotic liver. The contracted kidney is divided into two forms, the red and the white. They are not microscopically distinguishable. Clinically they are not distinguishable; pathologically the question of distinction is unsettled.

Chronic interstitial nephritis is often described as granular kidney, but chronic interstitial nephritis is not necessarily granular. For instance, unilateral lesion, due to obstructed ureter, may not be

granular. Fatty degeneration, fibrosis, infarcts and grumata, even if invading the parenchyma, are excluded, they do not produce the clinical symptoms of granular kidney. Degenerate kidneys due to atheroma, gout and age are not classified as granular.

Granular kidney is divided into arterial, sclerotic and renal, and are not clinically distinguishable. Whether the primary cause of the disease is in the vessels or the kidney itself is an important and an issue not yet settled. The symptoms of acute parenchymatous nephritis are well marked, while those of granular kidney are insidious and unrecognised. There is no relationship shown, either clinically or in any other way twixt acute nephritis and granular kidney. Attacks of parenchymatous may occur through a series of years, without albuminuria; without causing thickening of the arterio or cardiac hypertrophy and without causing retinæ change. In fact without producing clinical signs of granular kidney. Acute nephritis may result in granular kidney, but granular kidney does not cause acute nephritis. Granular kidney may precede acute parenchymatous nephritis. There are recognised forms of pathologic arteries—atheroma and thickening of the vascular walls, due to muscular hypertrophy and changes that are not atheromatous. Whether this condition is primarily arterial or renal is a mooted question; at all events, granular kidney is a disease *sui generis* and should be treated accordingly. Granular kidney is a very insidious disease, its symptoms only occur when the disease is well advanced. The first symptom is frequent micturition at night, and this is not constant. The symptoms are cardio-vascular and renal. The cardiac symptoms are those of cardiac failure, varying in degree. The vascular symptoms are hemorrhagic and arterial. The defective action of the kidneys causes renal toxemia.

The signs and symptoms are : (1) physical signs; (2) the cardio-vascular symptoms; (3) the renal symptoms.

The early signs of the disease are the most important. In the early stage the diagnosis is to be made by physical signs, which are high tension pulse, thickened arteries, hypertrophy of the heart and albuminuria. Hypertrophy of the heart is probably secondary to the vascular changes and the result of them. Thickening of the arteries is a cardinal sign of this disease, and is never absent in advanced cases. Albuminuric retinitis is an early sign. High tension pulse and thickened arteries, in the young, indicate the initial stage of granular kidney.

Selections and Abstracts.

MALTINE WITH CREOSOTE IN INFECTIOUS DISEASES.

THE study of infectious disease received a new impetus and was placed upon a new basis when the agency of bacteria in its production was discovered. The efforts of clinicians were then directed to the influence of remedies upon the parasitic and living causes of disease. The great desideratum was to find substances having the power either to destroy microbes or to neutralise the noxious products which they elaborate. In the course of such experimental studies, however, we were led to realise more forcibly than ever before the resistant powers of the human organism. It was learned that it is not the mere presence of bacteria within the body that is the most significant fact, but their germination, reproduction and cultivation, and, above all, the poisonous products by which the infection of blood and tissues is accomplished. Thereafter the fortification of the organism acquired fresh importance. The attention of physicians was directed not only to the destruction of microorganisms and the neutralisation of their poisons, or toxins but also to the assistance of the tissues in their struggle against the invaders.

As long as, by any and every means, general nutrition can be maintained at the normal standard there is little to be feared from the presence of pathogenic bacteria. If, however, the general vitality be reduced by any cause, our diminutive foes can then not only enter, but can contaminate the system.

These discoveries have thrown new light upon the operation of many medicinal substances, and have served to direct our energies to the support of the threatened organs and tissues. A nutritious principle which is so influential in promoting the digestion of one of the great food-groups—viz.: the carbohydrates—has a wide range of applicability. It adds to the nourishment of the feeble. It restores digestive power and physical energy to those who have been notably reduced by a lingering illness. It promotes the healthy growth of muscular structures and strengthens the functions of secreting glands.

Accordingly skilfully prepared and reliable preparations have long been favorably known to and beneficially employed by physi-

cians in the large class of morbid conditions in which they are indicated. Several active remedies or combination of remedies have from time to time been added to the plain maltine in order to adapt it to a wider field of usefulness. The latest of these excellent additions to a worthy line of products is maltine with creosote.

In the purely medicinal, as distinguished from the climatic treatment of tuberculosis, creosote has approved itself as a remedy of the first rank. It undoubtedly possesses considerable inhibitory influence over the development of the bacillus tuberculosis. It relieves the prominent symptoms of phthisis more effectually than any other remedy. Creosote is often able to hold this destructive malady in abeyance for an indefinite period or practically cure the disease. Therefore a combination of maltine with creosote appeals most powerfully to the medical profession. So much of the physician's work has to do with tuberculosis in its varied manifestations and localisations that a warm welcome will doubtless be extended to this new preparation. Its nutrient and antiseptic properties render it admirably adapted to fulfill many important indications. We are assured that the creosote contained in this preparation is perfectly pure, and we have learned by painful experience that there is a vast difference between pure and impure creosote. Each fluid ounce of maltine with creosote contains 4 minims of pure creosote. Creosote is an efficient remedy in many morbid conditions of the intestinal tract, and this new combination will, consequently, be found of service in many cases of chronic indigestion.—*Monthly Cyclopedia of Practical Medicine*, June, 1899.

THE USES AND EFFECTS OF GUDE'S MANGANIFEROUS IRON PEPTONE.

By JULIUS HEITZMANN, M. D., Vienna.

THE employment of iron preparations, both in essential anemia (chlorosis) and in the symptomatic forms of this affection produced by severe losses of blood, dates from the earliest times. Long before the chemical relation of this effect was known, these remedies were administered on the ground of pure empirical experience.

When Hannon pointed out the high significance of manganese, as well as of iron, with regard to the absorption of oxygen by the blood, and when this discovery was confirmed by Ruehle, efforts were made to produce, by combination with both remedies, prepara-

tions which would best fulfill the therapeutic indications in all directions.

Former attempts of this kind failed to give the desired results. The aim was to combine both metals in such a form as would enable them to be absorbed throughout the entire extent of the alimentary canal, and at the same time be devoid of disagreeable taste which would prevent their prolonged administration. After a series of experiments made in this direction I found in the preparation discovered by Dr. A. Gude (Pepto-mangan—Gude), a remedy which fulfilled the above requisites and can recommend it most heartily.

Pepto-mangan—Gude is a clear, dark, wine-red fluid, having an agreeable, non-metallic, astringent taste. The latter property gives it a great advantage over other similar preparations, for the remedy is always taken with pleasure, and may therefore be administered for a long time without exciting the disgust of the patient. No irritation of the stomach is produced, nor is the digestion disturbed in the least respect; indeed, as regards the latter, a stimulation of the long absent appetite could be demonstrated within a short time.

The Pepto-mangan—Gude, usually mixed with some water, is prescribed in doses of two or three dessertspoonfuls, increased to as many tablespoonfuls per day. An especially agreeable manner of administration is by addition of cold milk, which then assumes a light chocolate color and an agreeable taste. Prescribed in this form we obtain from this preparation everything that could be expected from a remedy for anemia. The Pepto-mangan—Gude may also be mixed with white and sweet wines, excepting the red wines which contain tannic acid, and an occasional change in the manner of administration is sometimes of advantage, especially in the case of children.

The diet, during the use of this preparation, should consist of milk, meats—especially ham—fowl, soft-boiled eggs, and other easily digested foods. On the other hand, sour and fatty foods, red wines, and raw fruits are to be avoided.

The remedy is to be administered for a number of weeks, especially in cases of chlorosis, but in the case of young girls up to twelve years of age it is best to commence with a daily dose of two teaspoonfuls (ten grammes). In adults the dose of the Pepto-mangan—Gude may be increased in a few days to one tablespoonful twice or thrice daily, or even to ten or twenty grammes. The preparation should be well protected from the light, and preserved in a cool place, in a well-stoppered bottle.

I have employed the Pepto-mangan—Gude with much success, both in chlorosis and in cases of anemia in girls and women due to loss of blood, menorrhagia, metrorrhagia, inflammation of the pelvic organs, peri- and parametritis, or prolonged leucorrhœa. In almost every instance I observed within a short time increase of appetite, improved nutrition, healthier color of the face and increase of weight. I was surprised to learn how much more readily the Pepto-mangan—Gude was taken than similar preparations, without ill effects even after protracted use.

To illustrate my remarks I will cite a few cases: I will first report a case of chlorosis treated with this remedy, which was under constant observation.

Case I.—The patient, a school-girl, aged 16, began to menstruate one year ago, but after appearing regularly for three periods the flow suddenly ceased, probably in consequence of mental overexertion, and symptoms of chlorosis soon developed. The various preparations of iron were tried, but were either not well borne or excited so much disgust that they were discontinued by the capricious patient. A milk cure was prescribed, but followed for only a short time. When, however, I resorted to the Pepto-mangan—Gude I was surprised to find that the girl took it willingly and that it was well borne. She made a rapid recovery and, after the use of two bottles had regained her former healthy color, while her strength and menstruation returned.

Case II.—A married lady, aged 24, had acquired—apparently of abortion at a very early period—an intense peri- and parametritis with an exudation of the size of a child's head. The latter disappeared almost completely under suitable treatment and rest, so that only a slight induration was present in the parametrium after three weeks. Owing to the considerable anemia and loss of appetite, however, the patient recovered very slowly, and for this reason I ordered the Pepto-mangan—Gude. A few days after its use the appetite reappeared, recovery ensued rapidly, and five weeks later her health was completely restored.

Case III.—A married lady, aged 30, had suffered from leucorrhœa due to catarrhal inflammation of the vagina for two years, and although the local trouble had been much relieved she continued pale and weak. As her chlorotic daughter at the time was taking the Pepto-mangan—Gude with marked benefit, I advised her also to try this preparation. She followed my advice, and after fourteen days the weak, sluggish, and pale woman seemed as if transformed. She has since regained her former health.

These few cases, which were under continued observation, will confirm what has been said above regarding the manner of applica-

tion and effect of Pepto-mangan—Gude. I regard it as superfluous to cite other cases, since a few closely observed cases teach more than a host of superficial observations.

On the ground of my experience I consider myself warranted in directing the attention of physicians to this remedy, and feel convinced that further trials will give equally favorable results. Even in cases where local treatment is necessary the Pepto-mangan—Gude will prove a valuable auxiliary in our treatment.—*Allgemeine Wiener medizinische Zeitung*, xxxvi.

CLINICAL NOTE ON PREPARING SOLUTION OF LACTO-SOMATOSE.

LACTO-SOMATOSE is now generally considered as a prominent food and restorative in the treatment of gastro-intestinal diseases attended with marked exhaustion, due to the draining of fluids from the system and the marked impairment of the digestive functions. Hence, a few remarks as to the manner of conveniently preparing solutions might not be out of place. The simplest way of dissolving the preparation is to place the desired dose upon the surface of about one-quarter glassful of hot water and allow it to dissolve without stirring. This will require about ten to fifteen minutes, when a clear solution of agreeable taste and appearance is obtained, which may be drank in its own form or mixed with ordinary fluids, such as milk, soups, gruels, etc. Another simple means of dissolving lacto-somatose is to sprinkle it upon hot milk or broths with a dry wire sieve. A still other method is to stir it into a smooth paste with a little water before adding the remainder of the solvent, but this may be conveniently replaced by the above methods. The chief points to which attention has been particularly directed with reference to the therapeutics of lacto-somatose comprise its large percentage of assimilable albumins, rendering it a prompt and efficient tonic and food; its beneficial action upon the digestive tract, stimulating the appetite and relieving vomiting, and its freedom from taste and odor enabling it to be added to a variety of beverages, so that it never excites repugnance, even when administered for long periods.—*Clinical Notes*.





THOMAS LOTHROP, M. D.,
Editor BUFFALO MEDICAL JOURNAL, 1879-1899.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature and books for review, should be addressed to the editor:

224 FRANKLIN STREET, BUFFALO, N. Y.

VOL. XXXIX.—LV.

AUGUST, 1899.

No. 1.

DR. LOTHROP.—VOLUME LV.

DR. THOMAS LOTHROP, whose name has stood at the head of the editorial department of this Journal for twenty years, has severed his relations with the magazine and has transferred his interest to Dr. William Warren Potter, who thereby becomes sole owner and editor-in-chief. It is proper that the Journal should make comment appropriate to an event so significant in its history.

Very few men have sustained editorial relations to a medical journal for so long a period as twenty years and this circumstance, alone, speaks strongly of the character and individuality of the distinguished retiring editor. During a considerable part of the time he maintained relationship to the Journal Dr. Lothrop was an active, if not a leading spirit in the conduct of its affairs. His ready and forceful pen was often wielded in its columns and his tactful business acumen guided its career on the road to success. He has occupied a position of prominence in the medical profession during all this time and today stands second to none in all that constitutes a strong physician, a useful citizen and an upright man.

It is with a view to lessen his responsibilities that Dr. Lothrop takes leave of the Journal and it is needless to add that the Journal parts from him with regret. It hopes, however, to have the pleasure of printing an occasional contribution from his pen, in which case our readers will not lose the benefit of his professional

experience. He has a fund of valuable material that could be utilised and he will do himself sad justice, as well as subject his colleagues to great disappointment, if he fails to use it for the benefit and advancement of medicine. He is yet in the prime of life and in the possession of a physical vigor that gives promise of continued usefulness for many years, as the portrait we publish from a recent photograph bears testimony.

We feel sure that every reader of the Journal who knows Dr. Lothrop will join with us in the sentiments we have expressed, as well as in tendering to him best wishes for a long continuance of his prosperous and useful life.

The Journal enters upon the fifty-fifth year of its publication with two additions to its editorial staff. Dr. Nelson W. Wilson, who has had a wide journalistic experience in New York and Buffalo, becomes assistant editor. Dr. Wilson's contributions to the Journal have been well received and he enters upon his duties with enthusiasm. Dr. Maud J. Frye, one of the best known of Buffalo's medical women, has earned her place as an associate editor through a high class of editorial work heretofore performed. It is needless for us to add that the Journal is more than pleased to acknowledge the faithful and meritorious services of Dr. William C. Krauss, who becomes an assistant editor. The other members of our editorial staff, Drs. James Wright Putnam, John Parmenter, Ernest Wende, John A. Miller and A. A. Hubbell, are entitled to our grateful thanks for valuable services and loyal interest in the welfare of the magazine. Our readers may be sure of a continued determination on the part of the entire staff to make the Journal grow better and better with each succeeding year.

We invite especially the support of the medical profession in Western New York to the end that the Journal may attain the ideal that it has always aimed at—namely, to be a creditable exponent of the science and art of medicine for the region it represents.

William Warren Potter

THE CHRISTIAN SCIENCE DECEPTION.

CHRISTIAN science and its adherents came out into the open at the hearings before the committee on ordinances of the board of aldermen recently, when the ordinance proposed for the regulation of promiscuous treating of the sick and injured was under consideration. This ordinance was introduced at Dr. Wende's request. Briefly, it requires that a report of all contagious cases under treatment be made to the Health Department within a certain number of hours. This includes christian scientists, faith curists, mesmerists, clairvoyants, long-distance practitioners and other curiosities.

Naturally, the christian scientists, who do not diagnosticate disease because they do not believe in disease and pray over diphtheria and scarlet fever with the same degree of fervor as they exhibit in curing corns, sounded the alarm and flocked to the City Hall to fight the measure. They brought their "healers" and their friends and their dupes. They all had much to say, and some of the women of Buffalo—some of them prominent as prominence is gauged on the social scale nowadays—rushed into print to give vent to their excess of feelings over the outrage which a health commissioner of the modern school was inflicting upon the anointed of the Lord. One woman in particular, whose husband had "passed on" while prayers were being said for his relief, went so far as to publicly state that in the event of the passage of the ordinance she would break the law just as often as she could. Well and good. That is her privilege. If she does, however, the JOURNAL feels confident that the lady will eventually be in a position to speak from the depths, and that her social position will in no wise be a safeguard for her; that she will meet the same fate as an ordinary, every-day and less pretentious violator of the health ordinances.

At the hearings Dr. Wende made his position very clear. He showed how dangerous was the practice of permitting these "healers" to trot about from one case to another; from scarlet fever, diphtheria and other communicable diseases, to whooping cough and cramps, and then to the fountain head of their alleged inspiration, carrying and disseminating the germs of disease. He showed how futile it would be to attempt to prevent epidemics if an irresponsible body of fanatical believers were permitted to treat diseases which actually existed, but which they in their blind confidence in the soothsayings of an acute seeress deny as ever existing, either in fact or fancy.

The "healers" had a chance to talk, and they did talk. They talked. That is their profession and their therapeutics. That's all

they did do, save in one case, where a very brave gentleman, whose El Mahdi-like devotion led him to make a blatant fool of himself, asserted that he could cure anything from croup to corns and back again through the long list of human ills, chronic and acute.

Dr. Wende made a proposition. He offered to supply a certain number of chronic cases from his own practice and of his own observation. If cures were effected—he, Dr. Wende, would then become a christian scientist.

The scientists claim they are not amenable to the law because they do not give medicine. It seems to the JOURNAL that any one who pretends to or actually does relieve pain, cure the sick and make the weak strong, and does this for pay, practises the art and science of medicine, no matter whether he administers drugs, lays on hands, gives advice, or prays. The ultimate object is the same in every case—the relief of suffering.

The whole object of Dr. Wende's crusade is apparent to every sensible human being, who is not blinded by bigotry or filled with a fixed fanaticism. No one objects to a grown up person enjoying personal liberty to its fullest measure. No one objects to a grown up person employing any means which seem to him proper to reach the Throne of Grace, nor to his employing any means to gain relief from pain or suffering. What is objected to, however, is the practice of submitting babies and over-awed children to the muttering of prayers by christian science healers, the hanky-panky finger weaving of faith curists, or the snake-skinning, stick-throwing incantations of voodoos and witch-doctors.

The law steps in and takes charge of a minor child's material interests; it should also, and does if properly interpreted, step in and guard his physical interests with equal fidelity and watchfulness. If adult believers prefer to "pass on" to prayer accompaniment, all well and good. There is none to say them nay; but they have no moral or legal right to interpret in its literal sense that most comforting of all Biblical passages: "Suffer little children to come unto Me, for of such is the Kingdom of Heaven."

A THERAPEUTIC NEED.

IT REQUIRES no prophet to see indications of the greater prominence that therapeutics is to attain in the next decade. The impetus given by research and discovery along the line of specific treatment of disease, has been decided. But while the medical world

is first dazzled then stimulated by such a discovery as that of the anti-toxins, we are convinced that a large part of the foundation of a sounder therapeutics must be a more intimate knowledge of our well-known older drugs and of their influence upon the diseased body.

It appears to us, therefore, to be especially needful that of our book of standards, the U. S. Pharmacopeia, shall possess the necessary resources for the progressive therapist in respect to old drugs as well as new. Interest in the coming revision of this book is increasing. There is properly much thought as to what shall be admitted; but there should be more regard for the character, as to uniform activity, of the preparations of drugs, which for years have been known to be valuable.

The lines of construction of a pharmacopeia of national authority must necessarily be conservative. Nothing of uncertain character can be admitted, or its value as a standard is destroyed. For the same reason its scope is a restricted one. Greater, therefore, the need of bringing it at each revision up to the mark of most advanced scientific progress, in view of the long interval of ten years between additions. In addition to the incorporation of details which have been matured, each edition should mark the recognition of new principles that can 'serve as guides' to progress in pharmacology until the succeeding revision. Thus in the last edition (1890) the principle of standardisation of preparations by chemical assay was recognised in its application to cinchona, nux vomica and opium. To demand that this principle be now applied to other drugs just as far as is possible, with due regard to practicable methods, is the right of the profession. Particularly so, because the uncertainty of drug activity has always presented a hindrance to scientific therapeutics. Efficient medicinal treatment requires not only a knowledge of drugs and their application, but first of all uniformly active drugs. In respect of furnishing such, no doubt the large manufacturer, who can assay by elaborate methods, has an advantage over the retailer with moderate equipment; and so far as his methods are ethical and scientific they may be competent to lead the pharmacopeia in lines of progress. Certain it is that the authors of the next revision will have to face the question of recognising another principle—namely, that of standardisation by other than chemical tests. No one will question the propriety of recognising antidiphtheritic serum, but it cannot be standardised by chemical means. The same is true for the present of digitalis, ergot and

cannabis indica particularly, whose activities are greater than those of any of their isolated constituents.

One manufacturing firm has given an impetus to the method of physiological testing of drugs and has done commendable work in that direction; and when it is reported that large quantities of drugs have been found inactive, we may well question the value of many of the galenical preparations dispensed.

The need of more reliable drug preparations is imperative, and if we cannot look to our pharmacopeia to fix standards of activity its usefulness will be on the decline.

THERE has been so much notoriety attached to christian science and its "healers" the past month or two that an exposé of the teachings of the seers of the cult will be particularly interesting at this time.

In almost every daily newspaper one picks up nowadays one sees reports of deaths under the beneficent ministrations of the so-called "healers," or maybe a death-bed denunciation of the healers and their methods, or a report of a sorrow-ridden family's anguish over the death of a child of tender years, whom whooping cough had claimed while a healer sat by and looked wise.

In Buffalo, too, there are now evidences of the christian science evil. On another page reference is made to Dr. Wende's attitude, and to the women who have rushed into print. The Saunders case is too recent to need more than a passing mention.

The exposé printed elsewhere is an illustration of the good a daily newspaper can do when it gets on the right track. The New York *World* sent one of its reporters out to learn the truth and published it. How well he succeeded may be learned by reading the first article published in this issue of the JOURNAL, which is a careful resumé of the *World's* exposé.

BY MEANS of a cable dispatch to the newspapers from London, it is learned that Dr. Lambert Lack, the eminent throat specialist, who is honorary surgeon to the Golden Square Throat Hospital, has discovered the cause of cancer, the will-o'-the-wisp of the medical fraternity.

Dr. Lack, the cable says, has been studying the question for years, and has learned that the "disease invariably began with an

injury of a particular character to what is known as the basement membrane of the mucous membrane and its allied structures.

"Having arrived at this important truth, he set to work to produce cancer in the lower animals, and succeeded."

The whole subject matter was presented to the London Pathological Society by Dr. Lack, and by that society was thoroughly investigated. The result of the deliberations was an unqualified approval of the discovery.

Dr. Lack the cable also says is now experimenting with a serum for the cure of cancer under the auspices of the London society.

This is the second cancer discovery reported within a few months. A while ago Dr. Bra, of Paris, claimed to have isolated the cancer germ, but his discovery was discredited by Professor Curtiss of Lille.

Mayhap the Buffalo laboratory will have a discovery to announce shortly if the state authorities are patient and will continue the appropriation for the maintenance of the work.

The Buffalo *Evening News* has taken at last a common sense view of christian science controversy and makes this suggestion in a recent issue :

WHY NOT TAP THE FEES.

All the objections of the christian science people to the proposed ordinance seem to be based on the alleged interference with "deeds of mercy." They can't think of stopping people from caring for sick neighbors. Nevertheless, scientist healers tax their clients for the biggest kind of fees.

Why not amend the ordinance so as to cut off fees. Let neighbors attend neighbors all they like, but when one takes fees for treatment of disease and has no legally established qualifications for so doing make the punishment heavy and enforce it with rigor.

That will separate the money-makers from the doers of merciful deeds in short order.

This will have an excellent effect on the fakirs. It is well known they do not heal for sweet charity's sake. All they do is for the glory of God and the almighty dollar. It is part of their teaching not to heal without pay.

AT LAST the newspapers are becoming aroused to the evils that result from the practice of medicine by so-called christian scientists. The JOURNAL has no quarrel with these misguided people so long as they restrict their ministrations to the religious side of their work;

but when they assume to cure bodily ailments it is quite another question.

The New York *Tribune* recently published an editorial on this subject, which abounds with such good sense that we take pleasure in giving it space, as follows :

THE PRACTICE OF MEDICINE.

Let us leave in abeyance for a moment the general question of the efficacy of so-called "christian science." Let us recognise that opinions differ as to its scientific character, and as to its Christian character, and as to whether it ever does any good. The present point of consideration is its legal standing under the laws for the regulation of the practice of medicine. Christian scientists have all along contended that they are not amenable to the law, because, as they do not administer drugs and do not charge fees, they do not practise medicine. We observe that a coroner in Philadelphia sustains that view of the case, and charged his jury the other day to that effect.

That contention is a paltry quibble. So far as the charging of fees is concerned, it is perfectly well-known that christian scientists do in some cases charge regular fees, and in many cases, whether they charge them or not, receive them. Moreover, many regular doctors of medicine treat many patients free of charge. Are they not practising medicine when they do so? Is not the practice of medicine conducted at dispensaries and in the free wards of hospitals? Are we solemnly to assert that to prescribe ipecac and charge a dollar is to practise medicine, while to prescribe ipecac and charge nothing is not to practise medicine?

So far as the other point is concerned, relating to the administration of drugs, the quibble is equally obvious. The practice of medicine does not mean the giving of drugs. It means the healing of ailments by whatever means. The doctor who tells the patient to take more exercise, or to eat less meat, or to wear flannel, practises medicine in so doing just as much as though he prescribed quinine or blue pills. Every man who knows the meaning of English words knows that to be the case. What, then, is the use of saying that christian science is not the practice of medicine simply because it administers no drugs?

To do so is to plead the baby act, or to assume that all men are fools. It is time to stop such nonsense. Christian science ought to stand on its own merits, and be responsible for its doings, in an honest, straightforward fashion, and not try to shield itself behind a disingenuous quibble.

THE Buffalo Evening *News* recently made appropriate comment upon this misguided cult and its ridiculous opposition to the municipal ordinances in the following well-chosen words :

DANGEROUS PEOPLE.

Last night's hearing of the christian science ordinance made one thing clear.

The scientists refuse to be bound by the laws that govern everybody else in the community. They will not report cases of contagious disease, as every physician is required to do, and as in fact every person in the community is required to do, whether treating the disease or not.

The scientists thus abandon the claim of persecution which has been their stand by. They are not willing to abide by the laws that govern others. Their statement that this ordinance is being framed to catch them is true. They require special legislation because they defy the existing law, and by so doing spread disease.

Cases were cited last night where the scientists had sent children to school with contagious diseases, denying that there was contagion. There can be no safety for any one in the community when such practises are allowed. The scientists are dangerous people. They should be restrained by law from imperiling the health of the public by concealing cases of contagious disease.

THE report of the State Board of Medical Examiners of the examinations held in May, 1899, exhibits statistics as follows :

Total number of candidates	131	
Successful	111	84.73 per cent.
Unsuccessful	20	15.27 "
Rejected in anatomy	12	Rejected in one topic 10—10
" " physiology and hygiene,	3	" " two topics 3—6
" " chemistry	7	" " three " 1—3
" " surgery	3	" " four " 3—12
" " pathology and diagnosis,	9	" " five " 3—15
" " therapeutics, practice,		" " six " 0—0
etc	9	" " seven " 0—0
" " obstetrics	3	
	—	20—46
	46	
Highest general average		95.3 per cent.
Total number "honor" men		10

PERSONAL.

DR. WALTER BLACKBURN DORSETT, of St. Louis, was elected president of the Missouri State Medical Association at its forty-second annual meeting, held at Sedalia, May 16-18, 1899. Commenting

upon the fitness of this choice by the association the *Medical Herald* for June appropriately says :

After a preparatory education at Washington University, Dr. Dorsett began to study medicine in 1875, under Dr. LeGrand Atwood; attended St. Louis Medical College and was graduated March 14, 1878. He was assistant surgeon to St. Louis City Hospital, 1878-79; dispensary physician city health department, 1879-87; superintendent and surgeon-in-charge of St. Louis Female Hospital, 1887-92; is professor of obstetrics in Beaumont Hospital Medical College; gynecologist to the German Evangelical Deaconess's Hospital, and gynecologist on the staff of the Missouri Baptist Sanitarium.

Dr. Dorsett is a member of the St. Louis Medical Society and was its president in 1892; St. Louis Obstetrical and Gynecological Society, of which he was secretary in 1893-94, and at the present is its president; St. Louis Surgical Society Missouri State Medical Association; American Association of Obstetricians and Gynecologists, its second vice-president, 1897-98; City Hospital Medical Society of St. Louis.

He is a frequent contributor to the medical press, and possesses a genial disposition, which makes him a warm friend to his confrères.

DR. EDWARD N. BRUSH, superintendent of the Sheppard and Enoch Pratt hospital for the Insane, has been appointed professor of psychiatry at the College of Physicians and Surgeons, Baltimore. Dr. Brush brings an ample equipment to his new chair, being by experience and training one of the most accomplished alienists in this country and his many friends in Buffalo, where he formerly resided, are especially gratified to learn of this further recognition of his talents in the chosen field of his work.

DR. JOHN MCG. WOODBURY, of New York, lately chief division surgeon of volunteers, now clinical professor of orthopedic surgery in the medical department of Cornell University, has been appointed a commissioner on behalf of the United States for the purpose of observing and reporting on the medico-military organization of the German army in active operation during the fall manœuvres.

DRS. JOSEPH M. MATHEWS and L. S. McMurtry, of Louisville, and Dr. I. N. Love, of St. Louis, paid a short visit to Buffalo, July 8, 1899, when they were entertained at breakfast by Dr. William Warren Potter. Afterward the distinguished tourists went to Niagara Falls for a few days of rest and recreation.

DR. FRANK WHITEHILL HINKEL, of Buffalo, sailed for Europe, July 27, 1899, on the North German Lloyd steamer, Barbarossa. He will attend the Triennial International Otological Congress, at London, August 8-12, and afterward spend some time in recreation. He expects to return about September 15th.

DR. RUFUS BARTLETT HALL, of Cincinnati, was elected president of the Ohio State Medical Society at its annual meeting, held in Springfield, May, 1899.

SOCIETY MEETINGS.

THE American Association of Obstetricians and Gynecologists will hold its twelfth annual meeting in the Assembly room of the Denison House, Indianapolis, Ind., Tuesday, Wednesday and Thursday, September 19, 20 and 21, 1899.

PAPERS PROMISED.

1. The president's address, Edward J. Ill, Newark.
2. Three rare cases of kidney cyst, J. F. Baldwin, Columbus.
3. Postpartum repair of lacerations of the cervix uteri, Clinton Cushing, Washington.
4. The gonorrheal puerperium, Charles G. Cumston, Boston.
5., Rufus B. Hall, Cincinnati.
6. Injury to ureter in abdominal section, L. H. Dunning, Indianapolis.
7., J. B. Murphy, Chicago.
8. Coccygeal dermoid fistulæ, Robert T. Morris, New York.
9., X. O. Werder, Pittsburg.
10., Walter A. Jayne, Colorado.
11., C. C. Frederick, Buffalo.
12., Walter B. Dorsett, St. Louis.
13., J. Henry Carstens, Detroit.
14. Choice of method for total hysterectomy and some points of technique, B. Sherwood-Dunn, Boston.
15. Present position of gall-stone surgery with report of cases, William Wotkyns Seymour, Troy.
16., John B. Deaver, Philadelphia.
17. What shall we do with the post-operative hemorrhage of celiotomy? D. Tod Gilliam, Columbus.

18., M. Rosenwasser, Cleveland.
19. Choice of operative method from a mortality point of view, Joseph Price, Philadelphia.
20. Shall we operate during the viability of the fetus when at or near term? L. H. Dunning, Indianapolis.
21. The deleterious influence of tea and coffee in a certain class of gynecological cases, Walter B. Chase, Brooklyn.
22. One form of ovarian disease not generally recognised, W. H. Humiston, Cleveland.
23. Personal experience with uterine fibroids, Henry D. Ingraham, Buffalo.
24. Midsummer operations, Joseph Price, Philadelphia.
25. Observations respecting the symptoms and treatment of the menopause, Augustus P. Clarke, Cambridge.
26. Treatment of inertia and subinvolution of the uterus, Charles Stover, Amsterdam.
27. A simple, effective and esthetic operation for shortening the round ligaments, H. W. Longyear, Detroit.
28. Some observations, chiefly clinical, upon the temperature after intraperitoneal operations, L. S. McMurtry, Louisville.
29. Rupture of the puerperal uterus, with cases, James F. W. Ross, Toronto.
30. In memoriam—The life and character of Lawson Tait, by Charles A. L. Reed, of Cincinnati.

The titles of papers are announced in the order of their reception. The permanent program will be classified and issued August 25th, after which date no further titles can be added.

 It is considered especially desirable that each author of a paper forward to the secretary a concise argument thereof, under three or four separate heads, to be printed in the permanent program. This will add to the interest of the discussions.

All members of the medical profession are cordially invited to attend the scientific sessions.

THE American Proctological Society is the name of a new national medical association organised at Columbus, Ohio, June 7, 1899. The society is formed for the study of the diseases of the rectum, and its membership is composed of the following prominent rectal specialists, who became charter members: Joseph M. Mathews, Louisville; Joseph B. Bacon, Chicago; Leon Straus, St. Louis; B. Merrill Ricketts, Cincinnati; Thomas Charles Martin, Cleveland;

S. G. Gant, Kansas City; J. Royal Pennington, Chicago; James P. Tuttle, New York City; Samuel T. Earle, Baltimore; Lewis J. Adler, Jr., Philadelphia; Charles C. Allison, Omaha; A. Bennett Cooke, Nashville; George J. Cook, Indianapolis; George B. Evans, Dayton, Ohio; William M. Beach, Pittsburg.

The following officers were elected: President, Joseph M. Mathews, Louisville; vice-president, James P. Tuttle, New York City; secretary-treasurer, William M. Beach, Pittsburg; board of councilors, Samuel T. Earle, Baltimore; A. Bennett Cooke, Nashville, J. Royal Pennington, Chicago.

The next meeting of the association will be held at Washington, D. C., in May, 1900.

THE American Electro-therapeutic Association will hold its ninth annual meeting at Washington, D. C., September 19, 20, 21, 1899. The president, Dr. F. B. Bishop, appointed the following committee of arrangements: D. Percy Hickling, chairman, Joseph Taber Johnson, G. Lloyd Magruder, Z. T. Sowers, Robert Reyburn, G. Betton Massey, Charles R. Luce, Elmer Sothoron, Llewellyn Eliot, Clifton Mayfield.

Willard's Hotel has been chosen for the headquarters and special rates have been made for all interested in this meeting. Many able papers have been promised and a very successful scientific meeting is assured. There will be a large and varied exhibition of electro-therapeutic apparatus in Willard's Hall during the meeting of the association.

THE Niagara Falls Academy of Medicine held its last regular meeting previous to adjournment for the summer vacation at the office of the president, Dr. W. A. Scott, Monday evening, July 10, 1899.

COLLEGE AND HOSPITAL NOTES.

THE Buffalo Fresh Air Mission Hospital at Athol Springs opened July 1, 1899. It is situated on the lake shore, ten miles from Buffalo, and is reached in twenty-five minutes by train. The hospital is thus most favorably placed for the treatment of infants and children suffering from cholera infantum and other diarrheal diseases. Physicians are urged to send to the hospital any case of cholera

infantum or infantile diarrhea which would be benefited by the country air. The attention of the medical profession is also called to the fact that until the wards are filled with cholera infantum cases, children afflicted with any medical or surgical disease, not contagious, will be gladly received. The hospital is free, is equipped with all necessary apparatus, and is provided with resident physicians and trained nurses. Information furnished by Dr. Irving M. Snow, 476 Franklin street; Dr. DeWitt H. Sherman, 666 Main street, or at the Fitch Hospital, 165 Swan street. In urgent cases a telephone message can be sent to the Fitch Institute.

THE Hospital College of Medicine, the medical department of Central University of Kentucky, held its annual commencement at Louisville, June 30, 1899.

The announcement of the college was made by Dr. L. S. McMurtry, president of the medical faculty. Dr. McMurtry stated that last year the number of graduates was 130, while this year there were only 18. He explained that this was due to the increasing of the term from three to four years.

The presentation of candidates for the degree of doctor of medicine was made by Dr. Taylor, and he also awarded the honors and prizes. The Rev. Dr. Blanton, chancellor, conferred the degrees and Col. Bennett H. Young delivered the address to the graduates. He spoke in the highest terms of the graduates and paid a high tribute to Louisville and Kentucky colleges, particularly to Central University. The exercises closed with a benediction by Rev. Dr. Hemphill.

A HOSPITAL for sailors afflicted with tuberculosis has been established on the old Fort Stanton military reservation in New Mexico. This has been done at the instance of surgeon-general Walter Wyman, marine hospital service.

Some years ago, when Dr. Bratton of the marine hospital corps became affected with consumption and was obliged to seek his health in New Mexico, Surgeon-general Wyman instructed him to report in great detail concerning various sites in the territory that might be used for sanatorium sites. Ever since the report was submitted the surgeon-general has been endeavoring to interest the authorities in the matter, with the result already noted. The Fort Stanton reservation is one of the finest available for the use to which it will now be devoted. It consists of more than 10,000 acres, situated in

the Capitan Mountains, 6,000 feet above the sea. As soon as convenient all the consumptive patients who are now in the various marine hospitals of the country will be moved to the reservation. As Surgeon-general Wyman says, this movement is to isolate consumptives in a sanatorium, located in a country affording especial climatic advantages, is in line with the movement which is now going on all over the world to suppress the dread disease.

THE Buffalo state pathological laboratory has attracted the attention of the British parliament. According to a recent associated press dispatch, in reply to Sir Charles Cameron, liberal member for the Bridgeton division of Glasgow in the House of Commons, July 11th, 1899, the parliamentary secretary of the foreign office, William St. John Broderick, said the attention of the foreign office had not been previously called to the fact that owing to the death from cancer the New York legislature had endowed a laboratory at Buffalo to study the disease. But the under secretary added the British Charge d'Affaires at Washington would forthwith be asked to furnish the government with all possible information regarding the institution.

Book Reviews.

A MANUAL OF SURGICAL TREATMENT. By W. WATSON CHEYNE, M. B., F. R. C. S., F. R. S., Professor of Surgery in King's College, London; Surgeon to King's College Hospital, etc; and F. F. BURGHARD, M. D. and M. S. (Lond.), F. R. C. S., Teacher of Practical Surgery in King's College, London; Surgeon to King's College Hospital, etc. In six imperial octavo volumes, with illustrations. Vol. I, 285 pages, with 66 illustrations. Philadelphia and New York: Lea Brothers and Co. 1899.

The authors of this work have done just what the medical profession has been waiting for these many days. They have written a manual of surgical treatment, dealing chiefly with conditions, not theories, and giving information of practical value, not contenting themselves with telling what might be, but pointing out clearly and distinctly what is, and then describing what is best to do and when and how and why to do it.

A most noticeable feature of the first volume just issued is the absence of pathology. It would be unwise for a modern practitioner to feel satisfied with this work alone. It is a complete working volume, certainly, but a side knowledge of surgical pathology and

surgical conditions which are abridged or passed over in this work is absolutely indispensable. Thus a complete, modern and safe work on general surgery belongs by the side of this one. Such a volume as Park's, for instance, in connection with Cheyne and Burghard would be all that any intelligent man would absolutely need in the way of surgical works. Park is needed for its inestimable value in tumors and intestinal surgery, and above all for the very excellence of its surgical pathology; Cheyne and Burghard for its confidential way of telling of surgical conditions and their treatment.

In their introduction the authors say: "The great essential is full and detailed information as to the best methods of treatment. We have ourselves frequently experienced the want of detail, especially as regards the further treatment of our cases, and have had to learn the best methods of procedure from experience. It is this want that the present work is intended to supply. . . . We have tried to put ourselves in the place of those who have to treat a given case for the first time, and we have endeavored to supply them with details as to its treatment from the commencement to the termination of the illness. We have assumed that the writer is familiar with the diagnosis of the disease, and we only refer to the pathology and symptoms in so far as it is necessary to render intelligible the principles on which the treatment is based and the various stages of the disease to which each particular method is applicable."

That, in brief, is the prevailing idea. It is really a post-graduate book. No frills, no garnishing, no side issues. Nothing at all but meatiness. Just plain talk, in which every sentence counts. The authors write like men who have themselves felt the need of just such a book as they have given the profession—a working book, and to the end that it may be easily handled the publishers have put it into six volumes. Thus each volume is small; it is compact, it is fruity and it is handy. The day of lumbering, dead-looking and stalty medical works has passed. Hard as it is to find time to keep abreast of progress in these rush-days, it is still harder to pore over an immense thick book, which possibly is a nineteenth century fifth edition of an ante-bellum days first edition, republished because its author has been forced by progress of events to dress up the old introductions, add a little here and there on new subjects—sort of polish up the front door knob as it were—and because the publishers had the plates handy. The doctor of today wants a book that he can slip into his pocket if need be and read at odd times; he wants a book that he can catch up between times, drop into an easy chair, lean back and read and be comfortable. That's just the kind of a work Lea Brothers are putting out for Cheyne and Burghard. Aside from the rare value as a work on surgery it is a cosy sort of a book in itself.

In the first volume the opening chapters are devoted to inflammation, suppuration, and gangrene and ulceration. Under a general heading of wounds comes the management of operation, dangers of

operation, after-treatment and mode of healing. The various varieties of wounds are taken up and handled by the method and in the manner indicated in the extract from the introduction.

Syphilis, chancre, tuberculosis and tumors comprise the closing chapters. One of the most valuable chapters in the work, and one of immense importance is that on anesthesia and the giving of anesthetics by Dr. Fred J. Silk. This is really the most practical and understandable chapter on anesthesia which has been published in a long time, for Dr. Silk goes into detail and gives reasons for what he does, taking up each anesthetic—general and local, and advising as to use, in different conditions. There are no pretty pictures in this book. What illustrations there are tell some thing.

The volumes to follow will cover the subjects in this order: Part II., The treatment of the surgical affections of the tissues, including the skin and subcutaneous tissue, the fasciæ, bursæ, muscles, tendons and tendon-sheaths, nerves, arteries and veins; deformities. (In preparation.)

Part III., The treatment of the surgical affections of bones and joints, including fractures and dislocations, excisions and amputations. (In preparation.)

Part IV., The treatment of surgical affections of the head, face and neck; throat, nose and ear. (In preparation.)

Part V., The treatment of the surgical affections of the thorax, breast, spine, and generative organs. (In preparation.)

Part VI., The treatment of the surgical affections of the alimentary and urinary systems. (In preparation.) N. W. W.

TEXT-BOOK OF OPHTHALMOLOGY. By Dr. ERNEST FUCHS, Professor of Ophthalmology in the University of Vienna. Authorised translation, revised from the seventh enlarged and improved German edition, by A. DUANE, M. D., Assistant Surgeon Ophthalmic and Aural Institute, New York. With 277 illustrations. 8vo, 860 pages. Second American edition. New York: D. Appleton & Co. 1899.

It is seven years since the first American edition of this text-book was presented to the profession, and during that time five German editions have been issued. This is ample proof, in itself, of the high esteem in which the work is held in Germany, and the demand for another American edition shows the favor with which it is received in this country. The present edition is a great improvement over the previous ones, both on account of the revisions made by the author and the additions made by the translator. Much new matter has thus been incorporated, and the contributions of the translator, notably those on heterophoria and correction of errors of refraction, will be especially acceptable to the American practitioner. As the work now stands, it is a quite full exposition of the anatomy and physiology of the eye, and of its pathology and medical and surgical

therapeutics. What has been disregarded by the author, has been supplemented, in great measure, by the translator in his discriminating notes, and in this way both the German and American ideas are set forth.

The text-book as here presented is a scholarly work, and merits a foremost position among the numerous and excellent treatises on diseases of the eye. No one can study it without great profit, and no one having anything to do with the treatment of ocular diseases can afford to be without it. Not only is it a work valuable for what it contains, but it is also clearly translated, and is finely illustrated and printed.

A. A. H.

HOLDEN'S HUMAN OSTEOLOGY. Comprising a description of the bones, with delineations of the attachments of the muscles, the general and microscopic structure of bone and its development. Edited by CHARLES STEWART, F. R. S., Conservator of the Museum of the Royal College of Surgeons of England; and R. W. REID, M. D., F. R. C. S., Regius Professor of Anatomy in the University of Aberdeen. Octavo, pp. ix.—358. Eighth edition, illustrated. Philadelphia: P. Blakiston's Son & Co. 1899.

Every student of anatomy must look with delight upon this work. A study of osteology has been usually considered dry; but Holden has demonstrated that there really "is poetry in bones." The descriptive text makes the subject so plain and it is written in a way to give it such a charm that there is really no further excuse for ignorance of the bony anatomy of the human subject.

The first thirty-six pages of the work are descriptive of bone structure and its general composition, including its microscopical study and the transformation of cartilage into bone. These various branches of the subject are presented with absorbing interest and an accuracy of detail that is beyond criticism.

In his description of the several bones of the human body Holden surpasses any anatomist with whom we are familiar. Nearly one-third of the book is devoted to a description of the skull alone and no student of the subject can examine these pages without great admiration for the manner in which the bones of the skull have been described or without praise for the systematic manner in which the author has done his work.

Holden's description of the pelvis is another marvel in the way of teaching bone anatomy and his entire description of the human skeleton is simply admirable. In his comparative osteology Holden demonstrates his knowledge in paleozoology, and it is a fascinating addition to the usual way of presenting bone anatomy to the student.

The text is supported all the way through with accurate drawings on stone, the majority of which were originally made from nature by the author. A more superb piece of book-making has not been seen in many a day. With Gerrish's anatomy and Holden's osteology the text-books of human anatomy are complete.

TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA. Forty-fifth Annual Meeting, held at Charlotte, May 3, 4 and 5, 1898. Winston: Carolina Publishing Co. 1898.

This volume comes to us this year bound in cloth, which is a decided improvement over former editions, and gives the work of this admirable society a stability that it deserves. Besides the president's address it is the custom of this society to present an annual oration and an annual essay. In this instance these are presented by president Francis Duffy, of Newbern; Dr. Albert Anderson, of Wilson; and Dr. W. C. Brownson, of Asheville, respectively. The remainder of the volume is filled with original contributions and reports of committees, including the report of the state board of health.

HAY-FEVER AND ITS SUCCESSFUL TREATMENT. By W. C. HOLLOPETER, A. M., M. D., Clinical Professor of Pediatrics in the Medico-Chirurgical College of Philadelphia; Physician to the Methodist-Episcopal Hospital, etc. Second edition, revised and illustrated. Philadelphia: P. Blakiston's Son & Co. 1899.

The demand for the second edition of this little monograph within a year from its first publication is both a compliment to the author and to the discriminating audience which he addressed. Hay-fever is a perennial dread to its victims and has been until recently a *bête-noir* to physicians. This author states that he has given complete relief to more than 200 patients in his private practice; he has made a thorough clinical study of the disease and an exhaustive review of the literature relative to it. These facts entitle his treatise to patient consideration, as well as to the confidence of the profession of medicine. We commend it to all interested, whether physicians or patients.

TRANSACTIONS OF THE AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS. Eleventh Annual Meeting, held at Pittsburg, September 20, 21 and 22, 1898. Edited by WILLIAM WARREN POTTER, M. D., Secretary. Philadelphia: Wm. J. Dornan, Printer. 1899.

This volume presents a group of papers upon important subjects relating to obstetrics, gynecology and abdominal surgery. The president, Dr. Charles A. L. Reed, chose for the subject of his address, The evolution of specialism in medicine. It is a scholarly paper, abounding in classic lore, and is one of the most entertaining presidential addresses of the year. We think the whole profession of medicine might derive beneficial information from its careful reading. Another paper out of the common is Dr. Price's essay on The professional nurse and her training. Every nurse ought to possess a copy of this paper. Dr. Henry Howitt read a most valuable contribution relating to The surgical treatment of intussusception of

infants. Dr. Howitt's remarkable experience is shown by the fact that he has seen seven cases of this disease in children under one year, four of which have recovered after abdominal section for its relief. Dr. Cumston's paper on Septic infection of ovarian cystoma is a most valuable contribution to the literature of this subject. Every paper in the book presents practical aspects for the consideration of gynecologists, obstetricians and abdominal surgeons. The discussions make them stand out in strong light.

REPORT OF THE COMMISSIONER OF EDUCATION FOR THE YEAR 1896-97. Volume II. Containing Parts II. and III. Washington: Government Printing Office. 1898.

In this volume among other things is a chapter entitled, The learned professions and social control. It is written by Mr. Wellford Addis, specialist in the bureau of education, and contains much of interest to doctors and lawyers. A table, in two columns, gives the essentials required by the several states for entrance to these two professions, and there are several engravings of laboratories in foreign universities.

Another chapter gives statistics of professional schools that may be consulted with interest and profit by all concerned.

PROGRESSIVE MEDICINE, VOL. II. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by HOBART AMORY HARE, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, cloth, 472 pages, fifty-six illustrations and three full-page plates. Philadelphia and New York: Lea Brothers & Co.

The second volume of this quarterly presents carefully prepared and exhaustive papers upon the following subjects: Surgery of the abdomen, including hernia, by William B. Coley, M. D., of New York; Gynecology, by John G. Clark, M. D., of Philadelphia; Diseases of the blood, diathetic and metabolic disorders, diseases of the spleen, thyroid gland and lymphatic system, by Alfred Stengel, M. D., of Philadelphia; Ophthalmology, by Edward Jackson, M. D., of Denver.

These subjects are full of practical thought for the busy physician and they have been presented in a manner that will command attention. Our opinion unreservedly expressed as to the first volume holds equally good in its application to this one. The experience of the editor stands for much in the creation of such a book, and Dr. Hare has amply demonstrated in more fields than one his high scientific and literary ability.

The literary pendulum is swinging toward the quarterly standard. Such periodicals appear frequently enough to keep pace with the progress of medicine and they enable writers to furnish carefully pre-

pared material in studied form, the result of mature thought and in a fashion that will endure. We trust that a high standard of illustration, already established in the first and second volumes, will continue through the series. Good illustrations serve to accentuate the text and their free employment is to be stimulated whenever and wherever practicable.

INTERNATIONAL CLINICS. A Quarterly of Clinical Lectures on Medicine, Neurology, Surgery, Gynecology and Obstetrics, Ophthalmology, Laryngology, Pharmacology, Rhinology, Otology and Dermatology, and Specially Prepared Articles on Treatment and Drugs. By professors and lecturers in the leading medical colleges of the United States, Germany, Austria, France, Great Britain and Canada. Edited by JUDSON DALAND, M. D. (Univ. of Penna.), Philadelphia, Instructor in Clinical Medicine and Lecturer on Physical Diagnosis in the University of Pennsylvania; Assistant Physician to the Hospital of the University of Pennsylvania, etc.; Fellow of the College of Physicians of Philadelphia. Volume I. Ninth series. 1899. Octavo, pp. x.—303. Philadelphia: J. B. Lippincott Co. 1899.

The prominent lectures in this volume are Cold as an antipyretic, by Horatio C. Wood; Treatment of uterine fibromas, by A. Ricard; Injuries to the head, by John Ashurst, Jr.; Rational view of the appendicitis question, by John B. Roberts; Treatment of burns, by William G. Dugan; Use of electricity in surgery, by Alexander J. C. Skene; Extensive carcinoma of the lower lip, and resection of the superior maxilla for carcinoma, by James H. Dunn, and Lupus vulgaris, by Edmond Lesser. The entire contents, however, deals with subjects of interest many of which are well illustrated.

TWENTIETH CENTURY PRACTICE. An International Encyclopedia of Modern Medical Science. By leading authorities of Europe and America. Edited by THOMAS L. STEDMAN, M. D., New York City. In twenty volumes. Vol. XVI., "Infectious Diseases." New York: William Wood & Co. 1899.

The first article in this volume treats of Lobar pneumonia and is written by Andrew H. Smith, of New York. It is especially strong in pathology and Smith takes the view that it is an infectious disease. Under the head of etiology he states that while the essential cause of pneumonia is the development of a specific germ in the pulmonary alveoli, it is evident that, as a rule, there must be a contributing cause that in some way lays the system open to attack. In other words, that in any given case there is a condition present that favors either the migration of the germ into the lung or its development when there, or both. As to its communicability, he says that while pneumonia is unquestionably a communicable disease, it is not readily communicable from person to person. We have quoted substantially the author's words because they represent the most modern opinion on these points. The entire article should be read to be appreciated.

The next monograph is on Cerebrospinal meningitis, by A. Netter, of Paris. The importance of this subject is such as to justify a careful study of this contribution to its literature. The third title is Dysentery, by A. A. DeAzevedo Sodré, of Rio de Janeiro. The literature of the subject has been carefully collated and its pathology well considered. Yaws forms the subject of the next article, which is written by H. A. Alford Nicholls, Dominica, W. I.; Ernst Ziegler, of Freiburg, I. B., contributes an article on Inflammation; Otto G. T. Kiliani, of New York, writes on Erysipelas; Landon B. Edwards, of Richmond, Va., describes simple continued fever; Leo Popoff, of St. Petersburg, discourses on Relapsing fever; John S. Thatcher and John Winters Brannan, of New York, conclude the book with exhaustive articles on Typhoid fever.

Considered by and large, this is one of the most interesting and important volumes of the series for the general practitioner.

DEFECTIVE EYESIGHT. The Principles of Its Relief by Glasses. By D. B. ST. JOHN ROOSA, M. D., LL.D., Professor Emeritus of Diseases of the Eye, New York Post-Graduate Medical School and Hospital; Surgeon to the Manhattan Eye and Ear Hospital, etc. Duodecimo, pp. x.—193. Illustrated. New York: The Macmillan Co. 1899.

This practical little volume, published formerly under another title, has been completely rewritten by the distinguished author, teacher, clinician and practitioner, who not only adorns the special fields of his professional work, but is an ornament to the whole domain of medicine.

This publication in its new form and as it now stands will become one of the greatest aids to the general physician, who is most frequently first consulted in regard to defective eyesight. It instructs him how to proceed early in the simpler cases. There are so many symptoms that may come from eyestrain and other defects of vision, that it becomes the family doctor to be alert as to their quick detection and real significance. He should be competent at least to give the proper advice as to the seeking of counsel.

Refractive errors are nowadays quite common and muscle errors often contribute to the discomfort of patients. These must needs get speedy relief of the most intelligent kind, in order that the symptoms they produce may be permanently relieved. In this book will be found full consideration of these subjects. The value of the ophthalmometer is fully set forth as an aid to the diagnosis of many diseases and conditions, but there is very little said in regard to the employment of mydriatics.

It is pleasant to know that, whereas formerly ophthalmologists were prone to resort to the aid offered by these agents, now it is almost exceptional for a reputable ophthalmologist to use mydriatics. The science has so progressed that they are very rarely needed.

The printing of the book makes it easy reading, the type and color of paper rendering it pleasant to the eye.

The profession owes to the distinguished president of the Post-graduate Medical School and Hospital a debt of gratitude for the writing of this work, and it should be in the hands of every one who makes any pretense to the practice of medicine.

NERVOUS AND MENTAL DISEASES. By ARCHIBALD CHURCH, M. D., Professor of Clinical Neurology and Mental Diseases in the Northwestern University Medical School, Chicago; Professor of Neurology in Chicago Polyclinic and Neurologist to St. Luke's Hospital, Chicago, etc., etc.; and FREDERICK PETERSON, M. D., Clinical Professor of Mental Diseases in Woman's Medical College, New York, and Chief of Clinic, Nervous Department, College of Physicians and Surgeons, New York. Pp. 842; 800, with 305 illustrations. Philadelphia: W. B. Saunders, Publisher. 1899.

The author says of their work that it "is not the joint work of two writers, but each author—Dr. Church in Neurology and Dr. Peterson in Psychiatry—has contributed to the making of a single volume; each is, therefore, solely responsible for the work in his own department."

A few years ago there existed but one text-book on nervous diseases by an American author; now we have them almost by the dozen, and all creditable to their authors and to American neurology. The new comer finds itself in most excellent company and all things considered has very little to feel ashamed about. Doctor Church has certainly given us a very fine and valuable addition to American text-books and has treated his subject with great care and good judgment, not only in regard to facts warranted, but to the opinions of his co-workers. Dr. Peterson has restricted his part on psychiatry to his own work largely, and the great bulk of his references are to his own published articles in the various journals.

This perhaps is not wise in a book written for medical students and general practitioners as it gives the impression of exclusiveness—which although a desideratum in monographs—is yet not so desirable in a general text-book. To those more acquainted with Dr. Peterson's excellent original work, this book serves practically as a "gesammelte Arbeiten" of the Germans.

Dr. Church divides nervous diseases into eight parts, and these into chapters, dealing with the different forms of nerve, cord and brain disease, diseases of the nervous system, without known anatomical basis, symptomatic disorders, and examination of patients.

Under the neuroses or those affections without known pathological lesion, Church includes acromegaly, myxedema, exophthalmic goitre, tetanus, hysteria, neurasthenia and other so-called neuroses. He therefore is not a staunch believer in the theory that the thyroid, thymus, pituitary and other glands are solely responsible for these obscure affections, but is willing to wait for more conclusive pathological testimony. In speaking of hysteria, Dr. Church sides with

the French school and gives Charcot and his school full credit for placing this malady on a firm clinical basis.

Dr. Peterson divides his part into thirteen chapters, as follows : Chapter I., on definition and classifications of insanity; Chapter II., on general etiology; Chapter III., on symptomatology; Chapter IV., on examination of the patient; Chapter V., on general treatment, and Chapter VI. to XIII., on mania, melancholia, circular insanity, epileptic insanity, dementia, paralytic dementia, paranoia and idiocy respectively. These chapters are all written in Dr. Peterson's vigorous style and give a very careful and lucid description of these different mental states.

The book as a whole is a very commendable one, profusely illustrated, carefully written and represents to a very large degree the present status of neurology.

The publishers have aided materially in making it a handsome book in every respect.

W. C. K.

ATLAS OF EXTERNAL DISEASES OF THE EYE. By DR. O. HAAB, of Zurich. Edited by G. E. DE SCHWEINITZ, M. D., Professor of Ophthalmology, Jefferson Medical College of Philadelphia. With 100 colored illustrations. Philadelphia: W. B. Saunders. 1899.

Saunders's medical hand atlases are getting recognition everywhere as a part of the best medical literature of the period. Time was when the general physician knew very little of diseases of the eye, except possibly the acute inflammations of its structures. Now, with the rapid and accurate dissemination of knowledge relating to many of the more intricate yet common affections of the visual organ, any and every physician, no matter what his specialty, is expected to possess a reasonable degree of information upon at least the common diseases. This remark applies especially to refractive errors and muscular faults that occasion a train of unpleasant reflexes—symptoms that often deceive the novice and perplex the expert.

This book will aid the average practitioner of medicine to reach an intelligent conclusion as to conditions existing and the remedy for the same, in so far as they relate to external diseases of the eye. These are those that demand immediate action, oftentimes, to save sight and unless taken in the right way, even then vision may be lost or seriously impaired. The illustrations are so plain and the descriptive text is so clear, that it would be difficult to err, either in diagnosis or treatment, if Haab is closely studied and carefully followed as a guide. It is very difficult to portray in colors the diseases herein considered, yet the author has succeeded in doing so with amazing accuracy. The American editor has increased the value of the book for an American audience by the smooth yet accurate translation he has made, as well as by the comments he has occasionally interpolated in brackets. The name of de Schweinitz is an additional guarantee, if one were needed, of the value of this work.

BOOKS RECEIVED.

The Mineral Waters of the United States and Their Therapeutic Uses. With an account of the various mineral spring localities, means of access, etc. By James K. Crook, A. M., M. D., Adjunct Professor of Clinical Medicine and Physical Diagnosis at the New York Post-Graduate Medical School, etc. In one 8vo volume of 580 pages. Cloth, \$3.50, net. Philadelphia and New York: Lea Brothers & Co. 1899.

A Manual of Diseases of the Nervous System. By Sir W. R. Gowers, M. D., F. R. C. P., F. R. S., Consulting Physician to University College Hospital; Physician to the National Hospital for the Paralysed and Epileptic, Queen Square. Third edition, revised and enlarged. Edited by Sir W. R. Gowers and James Taylor, M. A., M. D., F. R. C. P., Senior Assistant Physician to the National Hospital for the Paralysed and Epileptic, Queen Square; Physician to the North-eastern Hospital for Children and to the National Orthopedic Hospital. Vol. I., Diseases of the Nerves and Spinal Cord. With 192 illustrations. Octavo. Price, \$4.00, net. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1899.

The Mechanics of Surgery. Comprising detailed descriptions, illustrations and lists of the instruments, appliances and furniture necessary in modern surgical art. By Charles Truax. Octavo, pp. 1,024. Chicago: 1899.

Transactions of the Southern Surgical and Gynecological Association. Eleventh Annual Session, held at Memphis, Tenn., December 6, 7 and 8, 1898. William E. B. Davis, M. D., Secretary.

The Medical Directory of the City of New York. Published by the Medical Society of the County of New York. Price \$1.50. New York: Wynkoop, Hallenbeck, Crawford Co., Printers. 1899.

Massage and the Original Swedish Movements. Their application to various diseases of the body. Lectures before the training schools for nurses connected with the Hospital of the University of Pennsylvania, German Hospital, Woman's Hospital, etc. By Kurre W. Ostrom, from the Royal University of Upsala, Sweden. Fourth edition, revised and enlarged, with 105 illustrations. Price, \$1.00. Philadelphia: P. Blakiston's Son & Co. 1899.

The Newer Remedies. A Reference Manual for Physicians, Pharmacists and Students. By Virgil Coblenz, A. M., Phar. M., Professor of Chemistry and Physics in the New York College of Pharmacy. Third edition, revised and enlarged; 150 pages. Price, \$1.00, net. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1899.

LITERARY NOTES.

THE *Bulletin* of the Cleveland General Hospital is a quarterly magazine of medical science, edited by Dr. Charles J. Aldrich for the staff of the Cleveland General Hospital. It is a handsomely printed, well edited, magazine and is in every way a credit to all concerned in issuing it. It is a pity, however, that it is not sent out flat. In these days the usual receptacle of the rolled journal is the waste basket; but it would be a mistake under such a rule to consign this handsome magazine to such base uses.

WILKINSON's *Medical Digest* is the name of a new publication which takes the place of the *Omaha Clinic*, that was formerly edited by Dr.

Wilkinson. The *Digest* contains good material, but it is ungainly in size. We think it a mistake for medical publications to aim to be *outré*, either in appearing under or over the ordinary size.

THE Louisville *Journal of Medicine and Surgery* and the *Louisville Medical Monthly* have been consolidated and the new magazine will be issued under the name of the *Louisville Monthly Journal of Surgery and Medicine*. It will continue to be edited by Professor Joseph M. Mathews, M. D., LL.D., and Dr. Horace H. Grant. Dr. Grant will be the business editor and Dr. Henry E. Tuley, former editor of the *Monthly*, will be managing editor of the newly consolidated magazine. The editorial staff will be further reinforced by the addition of Dr. A. M. Cartledge, an accomplished physician and a well-known writer. Certainly this is a strong combination of medical talent, and it ought to, as it no doubt will, make the new enterprise one of the best medical journals in the country.

MR. W. B. SAUNDERS, medical publisher, of Philadelphia, announces the following list of books to be published on or before September 1, 1899: The International Text-book of Surgery. In two volumes. By American and British authors. Edited by J. Collins Warren, M. D., LL.D. A Text-book of Embryology, by John C. Heisler, M. D. Diseases of the Nose and Throat, by D. Braden Kyle, M. D. The Treatment of Pelvic Inflammations through the Vagina, by W. R. Pryor, M. D. The Hygiene of Transmissible Diseases: their causation, modes of dissemination and methods of prevention, by A. C. Abbott, M. D. A Manual of Diseases of the Eye, by Edward Jackson, A. M., M.D.

The International Text-book will present a complete treatise on the theory and practice of surgery in its most advanced aspects. There is a real need among practitioners and advanced students for a work on surgery, encyclopedic in scope, yet so condensed in style and arrangement that the matter usually diffused through four or five volumes shall be given in one-half the space and at a correspondingly moderate cost.

In his Pelvic Inflammations, Dr. Pryor directs the attention of the general practitioner and specialist to a surgical treatment of the infectious pelvic diseases of women. The subject is a most important

one, inasmuch as inflammatory lesions constitute the majority of all pelvic diseases.

Kyle on the Nose and Throat, Heisler's Embryology, and Jackson's Diseases of the Eye are practical text-books for students, written by men of long and successful experience as teachers of these branches.

Special features of Dr. Kyle's book are the logical classification of the diseases, the modern pathology illustrated with new and original cuts, and the extended consideration given to details of treatment.

Abbott on Transmissible Diseases, is an important and timely contribution to the literature of preventive medicine.

THE Arlington Chemical Company, Yonkers, N. Y., has sent out to the medical profession a beautiful engraving in antique design of the Hippocratic oath. It is needful that every physician should become familiar with this medical classic, even though the necessity for the administration of such an oath is now obsolete. The Arlington Company will gladly supply any physician who has been overlooked, or whose engraving has been lost in transmission through the mail, upon the receipt of a postal card request addressed to the company at Yonkers, N. Y.

MESSRS. W. R. WARNER & CO., of Philadelphia, New York and Chicago, are distributing free to doctors and druggists, a very complete list of drugs, giving apothecary and metric doses. They are arranged in convenient columns and printed on coated linen cloth, size 22x14, for hanging at the prescription counter or in the doctor's office for ready reference. It will be sent to any doctor or druggist upon request by postal card.

THE Medical Libraries Fund is raising to enable the editor of *Medical Libraries*, Dr. C. D. Spivak, of Denver, to continue his work of collecting statistical data concerning the existing medical libraries the world over, and to lay the foundation of a rational system of exchange of duplicate books and periodicals between libraries. The request is sent out for all friends of medical libraries to become subscribers to the fund and to send their subscriptions to the treasurer, Dr. Edward Jackson, McPhee Building, Denver, Col.

THE Mellier Drug Company, of St. Louis, has recently mailed to the entire medical profession of the United States a handsome engraving of "The First Meeting of the Medical Society of London, held in 1773," together with a circular mentioning by name the members whose portraits are presented in the picture and stating in what particular field each was distinguished.

This engraving should prove an interesting and attractive addition to the office walls, and if through an oversight any physician failed to receive a copy or if his copy was damaged in transit, one can be obtained gratis by applying to the Mellier Drug Company, 2112 Locust street, St. Louis, Mo.

MISCELLANY.

THE William F. Jenks memorial prize.—The fifth triennial prize of \$500, under the deed of trust of Mrs. William F. Jenks, will be awarded to the author of the best essay on The various manifestations of lithemia in infancy and childhood, with the etiology and treatment. This prize is given under the auspices of the College of Physicians of Philadelphia. For details, competitors will address James V. Ingham, M. D., secretary of the trustees.

THE California Fig Syrup Company has obtained a permanent injunction in the United States Circuit Court, against Clinton E. Worden & Co, of San Francisco, a large non-secret manufacturing house. They are permanently enjoined from using the term syrup of figs or fig syrup, as the name of a laxative medicine which they manufacture, and are required to pay costs and account for sales of the imitations.

A GOOD practice for a competent physician is offered in a fine agricultural region in Western New York. The present incumbent has valid reasons for removal and would correspond with an earnest young physician with reference to terms and other details.

Address

BUFFALO MEDICAL JOURNAL, 284 Franklin street.

BUFFALO MEDICAL JOURNAL.

VOL. XXXIX.—LV. SEPTEMBER, 1899.

No. 2.

Original Communications.

THE IMPORTANCE OF EARLY DIAGNOSIS AND SURGICAL INTERVENTION IN FRACTURES OF THE SKULL.¹

By MARSHALL CLINTON, M. D., Buffalo, N. Y.

SEVERAL years ago Bluhm collected a series of over 900 cases, with the intent of demonstrating a lessened mortality in delayed operations following fractures of the skull. These statistics proved that in the immediate operation following injuries the mortality reaches 53 per cent., while in the delayed or later operations, the mortality is only 33 per cent., the other percentage being unknown. In these statistics, however, no reference is made to the ultimate condition of the patients with reference to epilepsy, insanity, and the like, as the result of these injuries; nor does he state what proportion of this 53 per cent. would come under the class of hopeless cases.

We roughly divide fractures of the skull clinically into basilar fractures (including usually the inoperable areas) and fractures of the vault. It is with this latter class we have principally to deal. When fractures of the vault are compound, as extensive or multiple, they are usually recognised readily by simple inspection. When, however, the fracture is a simple one, as a linear fracture, or be it ever so extensive or multiple, the diagnosis is frequently shrouded with more or less doubt.

To the cardinal symptoms, which Phelps lays down as the symptoms of all the fractures of the vault, I should add emphatically from the cases that I have seen—the rapid appearance of a heavily coated, moist tongue, and dry lips in from twelve to twenty-four hours after the time of injury. Too much stress cannot be laid upon

¹. Read at the semi-annual meeting of the Medical Society of the County of Erie, June 13, 1899.

the peculiarly doughy feel, usually the accumulation of blood and serum underneath the pericranium, which has been described by Pott. In speaking of the fractures of the bones of the skull it is, of course, recognised that the fractures of these bones, *per se*, are no more serious than those of any other bone of the body; the injury being from the trauma of the brain and adnexa. In all cases of fractured skull, whether they be small in extent or severe, we have a certain amount of hemorrhage from the under surface of the line of fracture, which gives rise undoubtedly to an increase of intracranial pressure. When the hemorrhage is severe, as in the case of a fracture across the middle meningeal artery or its branches, we have in addition to the increase of intracranial pressure, the local pressure of the nerve cells next to the suffused blood, and consequent degeneration from pressure. All cases of fractured skulls presuppose the existence of brain contusion, and these two conditions are so immediately connected with each other that only when no symptom or sign of fracture of the skull exists are we safe in not attempting surgical intervention. In certain instances we see evidences of diffuse brain contusion; and by brain contusion we mean either actual cell destruction or minute hemorrhages into the cortical brain substances. Injury to skulls, which are resilient in people between the ages of twenty-five and forty, in which the skull's diameters are suddenly changed, allowing of diffused pressure on the cortex without resulting fracture, are particularly difficult of diagnosis, and likewise unsatisfactory to treat.

Case I.—In the case of a sailor who was brought to the Fitch Hospital two years ago, suffering from an injury to the forehead and occiput, no evidence of fracture were found, but the man died five hours later in a condition of intense cerebral irritation—hyperpyrexia—diagnosis of contusion to the cerebellar structures. Post mortem examination showed the diagnosis to be correct and in addition, diffuse contusion to both frontal lobes.

Of course, in this class of cases operative procedure would have been of no avail. In other skulls where the bones are brittle enough to fracture extensively, sparing the underlying brain tissue, we see the reasons for the frequent apparently brilliant results following operations after extensive head injuries.

Case II.—H. M., on September 3, 1897, was struck on the left parietal region by a heavy plank and sustained a compound multiple depressed fracture involving the entire side of his head. On operating upon this patient I found that while the injury to the bone was quite extensive, there was very little, if any, injury to the brain tissue.

Despite the fact that the patient had one-sided paralysis on entrance to the hospital, the rapid relief of this condition by surgical methods before the cells had time to undergo any pressure degenerations resulted in complete recovery and he was discharged on the eleventh day following his injury cured, and since that time has suffered no ill-effects.

Case III.—C. S., aged $3\frac{1}{2}$ years. On the 31st of May, 1897, this little girl was struck on the head by a quoit, and sustained a deeply depressed fracture of the right parietal region. Aside from the respiration of this patient, the symptoms she gave were classically those of contusion described in all the text-books. However, I removed the depressed bone, and the next morning found the child sitting up in bed asking for mamma; cerebral condition relieved. She was discharged cured in a week, and since has had no ill-effects from her injury.

These two cases both illustrate particularly injuries to the bones with slight injury to the brain, which were relieved by prompt operation, in both instances the patients making perfect recoveries.

Case IV.—A. McM. was brought to the hospital eighteen months ago, within twenty minutes of the time of the accident with entire right side of his head crushed. The fracture was simple and presented all cardinal symptoms of cerebral contusion and fracture. On opening the patient's scalp and taking out some particles of bone, I found over the course of the meningeal artery considerable hemorrhage. The brain underlying the fractures was firm; he was pulseless, indicating effusion under the dura. From the extent of the man's injury it was thought that the only chance we had was the most thorough radical kind of relief. This was given him by removing a large portion of the bones from that side of his head, opening the dura in three different places, scraping and washing out the blood until the brain was clean and pulsating, plugging the meningeal vessel, and the wound was dressed. For the first three days the patient showed the symptoms of severe cerebral irritation, but on the fourth day he began to improve, and three weeks later was discharged cured. Since that time he has had no ill-effects from the injury. I have here a fragment of bone, including a part of the orbital plate, which was removed in the effort to reach the sub-dura clot.

Case V.—Frank R., on November 1, 1896, was struck on the side of the head by a picket. His symptoms were those classically of concussion, but as they did not clear up at the end of the third day and were a trifle more severe, it was decided to open up his head and see what the condition actually was. I found hemorrhage from the anterior branches of the middle cerebral artery. The clot was readily removed, the brain apparently regaining its normal position and pulsation. This patient made a rapid recovery and was discharged two weeks later as cured, but twelve months afterward

he was seized with his first epileptic fit, and since that time has had them at intervals of three to eight weeks.

I consider this case to illustrate that had this man been trephined at the time of injury he would have had no effects on his brain-cells from continued pressure, therefore no later ill-effects, as shown by his epileptic condition.

Case VI.—Another case of this kind was seen in J. The patient received a severe blow on the right temporal region and it was not deemed wise in the opinion of the attending surgeon to interfere in this case. The patient's condition remained apparently the same from the time of entrance to the seventh day. After a consultation, it was decided to operate upon the man, and examination showed him to have a depressed fracture of the temporal bone, without laceration or marked contusion of the brain tissue. The depressed bone was removed, but the patient made a very tedious recovery, and at the end of the month was transferred to the Buffalo State Hospital as an insane patient. After five months' sojourn there, he was allowed on parole, and eight months later was placed on light duty by the police department. It is safe to assume that in this case had proper examination been made (and by proper examination I mean an incision extensive enough to inspect the area of injury) a recognition of this injury and prompt surgical interference would have resulted in the man's recovery.

The length of time for cell-disintegration or pathological change to take place in the brain following pressure, such as produced by hemorrhage or depressed bone, has not as yet been established. By inference, however, we can see the irreparable harm which may result from improper recognition of cerebral conditions, and what a relatively perfect result can be obtained by the surgeon's use of his best information. As there is no danger in attending a simple incision of the scalp, we have at hand one very simple method of determining, to a great extent, the condition underlying any head injury.

90 N. PEARL STREET.

NEURASTHENIA FROM THE STANDPOINT OF A GENERAL PRACTITIONER.

By C. W. COULTER, M. D., Oil City, Pa.

IN THE class of neuroses, with its various manifestations, there is none so perplexing at times to the general practitioner, as the one upon which I shall speak briefly on this occasion. To listen to neurastheniacs enumerating their ailments is to say the least wear-

some, yet there is no complaint with which one must exercise more patience or give a more attentive ear than this, for each symptom enumerated by a patient thus afflicted only serves to confirm the true diagnosis of the disease; for surely it is a disease, a perversion from the normal, a poorly balanced condition of the great entity called physiological life.

This great something which we call physiological life, and which has been defined as force, or a constant and continuous adjustment of internal relations to external relation, lies in the nerve cell. If this accommodation of adjustment be disturbed, derangements are sure to follow, which will be in proportion to the extent of this failure of accommodation in adjusting the equilibrium of nutrition. According to Cajal, the psychic nerve cell, the trophic nerve cell and the motor and sensory nerve cell, are united by contact, and since nervous conduction is by contiguity of nerve cells and may be over a long distance of contiguous nerve cells, one can partially comprehend why so many and varied disturbances may arise from a failure of accommodation of adjustment, or a failure of nutrition of the nerve cell. When disturbances of this character exist we have a condition which is known by the distinctive name of neurasthenia.

Neurasthenia is perhaps more common in the United States than in any other country; in fact, it has been called the American disease. The American people are prone to neurotic troubles, their fast living, long hours of work, from which they either refuse or are unable to divorce themselves, often retiring late at night, with their minds occupied with cares that should infest only the day. The expenditure of nerve energy is almost constantly greater than the production and as a consequence, a nervous breakdown occurs, and tired nature demands a rest. Heredity plays a very important part in the etiology of neurasthenia. Those who inherit a nervous system weak in energy are extremely susceptible to neurasthenia, while those who inherit the opposite or a nervous system full of force are almost invulnerable to it. Many are the conditions which are considered etiological of neurasthenia, among which I may mention overwork, mental emotions—as worry, fright, sorrow—masturbation, sexual excess, and occupation of various kinds, but chiefly those of an indoor nature. Persons of an active brain, if nervously predisposed, or of a nervous temperament, or deficient in nerve energy, are especially prone to neurasthenia. Let their occupation be what it may, their power of adjusting the expenditure and production is not even; equilibrium with them in this respect seems to be an impos-

sibility. Perhaps if their environment could be somewhat changed to assist in the conserving of what little nervous energy they are capable of producing and the expenditure of the same lessened, results with them would be different.

To classify the symptomatology of this disease is next to an impossibility, but it may be grouped in a general way as relating to the digestive, vascular, motor, sexual, mental and sensory systems. The digestive symptoms are not of a regular type in all cases. There may be present in a given case one or more of the following symptoms—namely, gastric indigestion, intestinal indigestion, variable appetite, coated tongue, constipation, or an irregular condition of the bowels. Under this class of symptoms, I especially wish to invite attention to those pertaining to the abdomen, which are abdominal tenderness, colicky pains and the discharge of considerable mucus. The abdominal symptoms thus indicated are strongly symptomatic of neurasthenia.

The vascular symptoms are manifested by irregular actions of the heart, palpitation, tachycardia, and there may be bradycardia; hot flashes, coldness of the extremities and a mottled condition of the skin, due to vaso-motor disturbances, and polyuria may be present. The motor symptoms are mostly static in character and are general. The sexual are impotence, nocturnal emissions, spermatorrhea and prostration after coitus. The mentality of the neurastheniac is one of static depression. These patients lack power of mental concentration, are irritable, have a dread or fear of present or future happenings, which is undefinable; in fact, life to the neurastheniac is dotted with mythical absurdities and they are, in a word, pessimistic.

The sensory symptomatology is an important one; pains are complained of which are at times obscure and ill-defined, but the pain that is generally present in these cases and to which I attach considerable importance, is located at the base of the brain with a tendency to radiate down the spine. Upon examination there will be found one or more points of spinal tenderness. Vertigo occasionally presents itself and local anesthesia or hyperesthesia may be present. Sleep is generally extremely irregular, insomnia being a frequent and obstinate condition to deal with.

Nearly all diseases classed as neuroses are so-called function disturbances and are without any known pathology; in fact, many practitioners adhere to the belief that functional derangements have no special pathological significance, but at this late day we cannot

successfully claim that disorder of function has no anatomical correlate.

The physician of superficial examination and study is very liable to look upon these cases as hysterical or hypochondrical, usually administering some measures directed to meet his views, paying no further heed to them. The quack and charlatan are very apt to reap the benefit of such errors. That neurasthenia, hysteria and hypochondriasis are separate and distinct conditions there can be no question, admitting, however, that the neurastheniac may at times become hysterical. The diagnosis must be differentiated from lithemia, insipient melancholy, hysteria, hypochondriasis and the stigmata of degeneration.

It is not the purpose of this paper to go into the details of a differential diagnosis of these various manifestations of abnormal conditions, but I will dwell for a moment comparatively upon neurasthenia and lithemia. Believing, as I do, that neurasthenia is an inability to preserve the equilibrium of adjustment between production and expenditure of nerve energy necessary to the proper nutrition of the nerve cell, and that lithemia is a faulty metabolism due to insufficient oxidation of the ingesta, I can readily understand that the neurastheniac may become lithemic, and that a lithemic may suffer from neurasthenia; but if the careful observer will follow the two conditions clinically, he will soon discover that they are separate and distinct conditions. I am fully aware that some observers in the study of clinical medicine hold that many, if not all, cases of neurasthenia originate in autointoxication, claiming that autointoxication is produced by over-fatigue, sexual excesses, mental anxiety and the like, and that neurasthenia is more common among the indolent than energetic persons. Such theory does not accord with my clinical observations. A case from my clientèle will better illustrate than any theory I might advance.

Miss M., aged about 34, came under my observation and care a few years ago. Her cares were many, as she was compelled to earn her own livelihood. She was superintendent of a hospital, had a neurotic temperament, but always enjoyed excellent health up to the time of which I write. In her capacity as superintendent of a hospital she was nurse, head nurse, matron, housekeeper, bookkeeper, cashier and general overseer of the institution, in addition to superintending the training school for nurses. After a long siege of a typhoid fever epidemic, in which she had many extra cares, which were very arduous, she collapsed and soon consulted me for insomnia. Still later I was called to see her again, and upon careful examination found her suffering from the following symptoms: low spirits, seeking seclusion, skin mottled from vascular disturbances, hands and feet cold, headache, with a dull throbbing pain at the occiput, occa-

sionally radiating down the spine, a few points of spinal tenderness, insomnia, loss of interest in her work, loss of appetite with disgust for food, tongue slightly coated—all the symptoms of atonic indigestion—slight tenderness over the abdomen, but more especially over the cecal region, considerable abdominal pain, bowels slightly constipated, fecal discharges at times quite green, containing considerable mucus. Her pulse was small and weak, the heart examination revealed that organ healthy but weak as to force and normal as to frequency; there was no arrhythmia, no tachycardia, in fact no departure from the normal healthy heart other than that of being weak as to force. Temperature at no time during her disability was found other than normal. After this continued illness, extending over a period of about four years, at times better and others worse, she has now regained the power of adjustment between production and expenditure of nerve energy and is well.

Careful observation of this case failed to demonstrate lithemia or autointoxication, but all the symptoms pointed to nerve exhaustion. There is, it is true, a similarity in the symptomatology of the two diseases, which, I confess, is at times confusing but with our modern methods of diagnosis such as urinalysis and the like, the diagnosis becomes comparatively easy. Habit, temperament, family history, environment assist materially in making a diagnosis. All the cases of neurasthenia coming under my observation have occurred in persons who were active and energetic, while in lithemia the converse is true, hence we assert persons of indolent habits and phlegmatic temperament are seldom if ever subject to neurasthenia, while they are peculiarly liable to lithemia; on the contrary, energetic persons, of active habits and nervous temperament are peculiarly susceptible to neurasthenia, but rarely so to lithemia.

A patient under my care at the present time, presented at first consultation the following symptoms :

Mrs. D., aged about 40. Married. Mother of three small children. Previous to marriage she had been a school teacher and had always enjoyed a fair degree of health until about one year ago, when she broke down. She first consulted me on account of a severe cough, which was alarming her family considerably; the cough was almost incessant; there was no expectoration and no fever; examination of the lungs revealed nothing of an abnormal character. There was tachycardia, the heart running at 130 and over. She is naturally spare but seemed to be somewhat emaciated. There was considerable vaso-motor disturbance, as evidenced by the lowered condition of the cutaneous or peripheral circulation. Her history shows her to be of a neurotic family. She is very energetic and of a sunny disposition. Her household duties were too much for her; expenditure of nerve energy in her case exceeded production of the same and she was compelled to seek relief. Under treatment this patient improved rapidly; the cough, which was a neurosis, entirely disappeared, the circulation improved, the tachycardia ceased, the pulsations dropping to 70. About nine months after this she again called upon me for "numb spells and dizziness," which she says frighten her very much. Upon examination I found the tachycardia had returned, also the vaso-

motor disturbance, but not the cough. Under treatment this patient is again improving.

These two cases cited illustrate the variableness of the symptoms in the same disease. That a systematic train of symptoms can be arranged as a means of diagnosis in neurasthenia is scarcely possible. Each case is a study in and of itself. One will present symptoms of atonic indigestion, or what we might term digestive neurasthenia; another insomnia, with its attendant mental disturbances; another with sexual neurasthenia, and another with abdominal symptoms and the like. These groups may be predominating symptoms in as many different cases, or we may find them all present in a single case.

An eminent gynecologist once said it would be well for the surgeon to remember that women had other organs besides a uterus, ovaries and tubes. To this I would add that it would be wise to look well to the nervous system ere mutilating or unsexing the unfortunate sufferer. A case came to my knowledge a few years ago of a woman who had been ill of an obscure trouble for some time. Her family relations were not such as conduced to her happiness and contentment of mind. After failing of cure by her family physician, she visited one and another until a so-called gynecic surgeon informed her her trouble was all caused from the ovaries, and advised they should be removed, promising a cure; she submitted, but two years afterward she was still searching for some doctor who could cure her of neurasthenia.

Again, a young woman of my acquaintance became ill and was treated at first by a general practitioner of considerable ability. After a time she became convinced he could not help her, and sought relief from a physician in a neighboring town. This physician discovered she had a retroverted uterus, which he believed to be the cause of all her trouble. About this time she was disappointed of marriage and became worse. Finally, a homeopathic physician was consulted, but he, like the others, failed to cure and then all doctors were abandoned. For over a year afterward she was practically helpless, when the christian scientists convinced her of their ability to cure her, and succeeded in producing psychic influence enough to relieve her neurasthenia. Such cases as these point a moral and should be studied carefully.

Therapeutic indications in this disease are limited to the requirements of the individual case. The line of therapy must be decided upon from the history and present condition of the patient. We may classify our treatment as follows: psychic, environmental,

climatic and medicinal. In the psychic treatment the physician must have the absolute and perfect confidence of his patient, else his power will be *nil*. Hard, indeed, will be the task of the physician who attempts to treat a case of neurasthenia without first securing the patient's confidence. The physician must be able to direct the mind of the sufferer; he must be patient, kind, firm and enduring; he must satisfy the patient's mind of his ability to treat the case in a masterful way and then back it up with the skill that is convincing.

These patients should be free from care and worry; mental occupation, however, of some kind is necessary; if not their thoughts will continually revert to themselves, and the belief will grow upon them that their malady is incurable, hence such a morbid condition must be continually guarded against by the physician.

To apply environmental therapeutics is, sometimes, one of the most difficult of tasks, for not only the patient but the patient's friends have to be considered. Very frequently financial conditions will not afford a change of environment, and when such is the case, the physician starts with a handicap. The influence of sympathising friends, unpleasant home life, arduous duties and many other conditions of environment, which the alert practitioner will recognise, are conducive to a certain chronicity of the disease, to correct which is necessary and which requires tact and diplomacy on the part of the physician.

The type of the disease and the individuality of the patient must govern the physician in advising rest. If myasthenia, anemia and loss of flesh be present, rest in bed for a period of three or four weeks with forced feeding is advisable. Massage and exercise are both indicated in a number of cases for their metabolic advantages.

The diet of the neurasthenic should be very liberal, only such articles of food being forbidden as will be difficult of digestion. No routine plan can be adopted in the treatment of these cases. Atonic indigestion is almost a constant symptom and if improper food be given, fermentation with its consequent autointoxication is almost sure to follow. Fresh garden vegetables, as peas, beans, celery, spinach and the like, are wholesome and can generally be advised with advantage.

In selecting a climate for neurastheniatics, I have found the salubrious air of the sea shore more invigorating than the pure ozonised air of the mountains. If the patient cannot afford a rest at the sea shore, the next best plan is a change from the climate of

home to some place as distant as possible, where a psycho-climate-environmental change can be thorough.

In the medicinal treatment of this disorder I have very little confidence, and yet I do not wish to be understood as saying that there is nothing in drugs in the treatment of the disease. I do not believe, however, that drugs alone will restore the equilibrium of the nervous system when it is once disturbed. The symptomatic treatment is rational and reasonable. Emaciation, anemia, insomnia, cardiac disturbances, head pressure, indigestions, autointoxications and the like can all be materially improved by judicious medication. I have purposely omitted many points in the therapy of neurasthenia, my object being simply to call attention to the main points in the disease.

In conclusion permit me to reiterate, each case of neurasthenia must be diagnosticated individually and not from any single group of symptoms, and the therapeutics must be arranged to meet the demands of individual cases. In other words, each and every case of neurasthenia is a study in and of itself.

EXPERIENCE, JUDGMENT AND LUCK.

ILLUSTRATED BY A COMBINATION OF GONORRHEA AND PREGNANCY
AND TWO UNUSUAL ABORTIONS.

By NELSON W. WILSON, M. D., Buffalo, N. Y.

Attending obstetrician St. Mary's Infant Asylum and Maternity Hospital.

A RECENT writer in designating the qualities which should be possessed by a successful physician, named an unflinching nerve, exquisite good nature and ready resource. To these might have been added experience, judgment and luck. They do not teach any of these in the medical colleges of today. One gets excellent instruction; one gets quizzed, and one gets the benefit of a teacher's experience, provided the teacher has that happy little trick—too rare unfortunately—of being able to give a parcel of raw-material students the good of his experience. But experience comes with practice; judgment comes with experience and luck comes sometimes like a visitation of Providence, masquerading as experience, and very often giving judgment and experience, both, the very healthiest kind of help when a lift is most needed.

When a new doctor begins practice he takes his first lesson in experience—judgment follows as a matter of course. If the Lord is

with him, and his patient has fighting powers, his judgment is apt to be good. In other words, he has luck. Three cases will illustrate the triple title of this article.

In the days of the first flush of college weaning, when the faculty had signed themselves down on my diploma, and the great State of New York, through the regents, had officially certified to my ability to practise medicine and surgery, and given me a legal right to charge for my services, I was called to see a young woman who had come to Buffalo from the Queen's colony, across the river, full of shame, and a story of wrong. She had all the preliminary requirements for membership in a mothers' congress, save a marriage certificate and a ring. Being naturally sympathetic and anxious to show my interest in the fortunes and misfortunes of my patients, I listened to her long story of how it all happened.

Still, as a sort of reward for my sympathy and services to be rendered, I was informed that the gentleman who was at fault in the matter was willing and ready—nay, anxious—to pay all expenses of her illness. This and the fact that I was practising with all the earnestness, if not the ease, of a "real paid doctor, who carries a bag," enthused me. How I discovered that the young lady was also suffering with gonorrhea is quite as long, and quite as sad as the story of her life. Truly, the gentleman, secure under the protecting folds of the red cross of St. George, was lavish with his favors. I cannot truthfully say that he killed two birds with one stone, but it seemed, figuratively speaking, to amount to that.

At any rate, I went to work. Twice a day I visited that woman for days and days and days; I irrigated her carefully and conscientiously, and happy was the day when the discharge had ceased and she was rid of one trouble, with the other looming up in the near future.

I saw her, then, every few days after that for a few weeks, sympathising with her, cheering her and looking wise. And one morning I called and found that she was free from trouble and that her baby had been born in the early morning hours, without any discomfort to speak of, and that a neighboring physician had been called in after the birth of the baby and had taken charge of the case. While I was there he came in. He was an oldish man, with a supernaturally wise look and ragged whiskers. *En passant*, always get to windward of a supernaturally wise-looking man who wears his whiskers ragged. He had assumed charge, and he had a snap lock on that case. He could not relinquish the care of that baby, nor

that woman. He always "saw a labor case through," he said. And he did. Oh, yes, I would be recompensed for my share of the work.

He saw the case through and the gentleman in Canada paid \$40 good United States dollars to my friend with the supernaturally wise look and the ragged whiskers. I was, to use a racing term among the "also rans." I felt for a long time like that "fore and aft" regiment Kipling wrote about, which was stalked and potted from out the dark by the heathenish, knife wielding Paythans.

That is experience.

"I've had four children, an' I'm not goin' to have any more, doctor, not if I can help it, for th' old man's got a bad habit of drink, and the rent comin' due every thirty days, an' me doin' a full day's washin' every day for six days out of seven, to keep the sheriff out of th' house. I'm near four months gone now, an' can you gimme somethin' to help me."

That was the opening of she whom I call my judgment patient. I used, in answering her, the words of an old practitioner, who had given me the benefit of his years of wisdom, in many a comfortable hour's talk.

"You want to get rid of it?" I asked.

"I do," she said.

"If you will do as I say, I will guarantee that you wont have any trouble. You go home, and live as you have been living. Take care of yourself. Don't overwork and in five or six months you will be all right."

She came of a quick-witted race and she saw the point. She was good-natured about it, too. Two weeks later, I was sent for. It was Sunday, at 11 o'clock in the morning. I found her in bed.

"It came," she said, pointing vaguely at the bed clothes. She turned back the coverings and there between her thighs, wrapped in a piece of sheet, lay a fetus, probably four months, dead and dry, the clothes stained and hardened, the fetus attached to the cord, which passed into the vagina.

"When?" I asked.

"Last night, about 8 o'clock," she answered. That dead fetus had been there fifteen hours. Then I was stricken with a dash of judgment.

I covered up the little corpse and sat down and wrote a note to my old doctor friend, asking him to come. He came at once. While

awaiting him I gathered the history. The previous Tuesday "after a hard day's washing" she had pains. They continued all Tuesday night and Wednesday. They eased up Thursday; Friday there were more, and still more Saturday. Saturday afternoon at 6 o'clock she went to bed and at 8 o'clock the fetus had come away dead. It was attached. She waited an hour or so for the placenta. It not coming she had tugged on the cord, but could not budge it. All Saturday night and early Sunday morning she had at different times tugged at the cord and failing to get it clear, had sent for me. I had recently delivered a vi-para in the house where she lived. The case was perfectly normal and things went along with neatness and dispatch. This woman was present, and I presume she looked upon me as a sort of a boy wonder.

When my old doctor friend came, I had her repeat the story to him. He saw the condition of affairs and after cutting away the fetus, tried to clean out the uterus with his fingers. He could not and finally curetted her. She was in anything but good shape. She recovered finally, however, under my old doctor friend's care. She probably would not had I plunged ahead on my own responsibility, and then there would have been all sorts of ugly aspects to the case. I consider that my judgment center was working full time when I sent for assistance and a man of years and irreproachable standing. He found things as I found them and he assumed charge. It was a charity case and that made me feel content at his compliment: "You showed great judgment in sending for me in a case like this."

The luck case came to me recently with this history. Six weeks previously she had a miscarriage. She was employed on a lake vessel, and believing that everything had come away continued her duties. She flowed considerably for a week. Then the flow lessened, for a few days only to begin again. This kept up for four weeks. She had lost considerable blood, evidently, for she said she was very weak. She went to a doctor in one of the cities at which the boat stopped, and "he put pincers in and took out the after-birth." That was two weeks previous to her visit to me, and she had been flowing most of the time since. She was very anemic and weak. Her legs was edematous and she was, as she expressed it "not a bit of good for anything."

I found the cervix dilated sufficiently to admit my index finger, and I felt and removed a piece of placenta the size of a silver dollar. The uterus was thoroughly cleaned out and irrigated. Her urine

was examined and found to be albuminous. She was instructed to rest, was put on Basham's mixture and strychnine and she sailed away in her boat on its next trip out, a few days later, her duties being assumed by another woman. When the vessel touched Buffalo on its return trip I saw her. She reported that there had not been any flowing whatever, her urine had cleared up, the edema was about gone, and her lips was getting along toward the natural color. She was feeling better, too, and stronger.

If there is an element in this case more predominant than another, it is luck. Here was a woman who had every opportunity to enter upon a long and a dangerous siege of sepsis. I don't pretend to figure out how she escaped. I only know that she did, and I attribute it to luck.

131 FRANKLIN STREET.

WHAT SHALL BE THE MINIMUM STANDARD OF REQUIREMENTS FOR ADMISSION TO THE STUDY AND PRACTICE OF MEDICINE?¹

By WILLIAM WARREN POTTER, M. D., Buffalo, N. Y.

THERE is less occasion at this time for extended remark than at former meetings, when it has been my privilege to address this body. Then it was important to define our purposes, to discuss problems that were embryonic or only partially developed, and to declare our intentions as to future policy. Then the schools, the state, the people, the legislatures even, were jealous of their rights and fearful that we might invade them.

Now we meet with an accomplished task, at least in part, and with well-understood purposes as to further work that confronts us. At the present time one of the most urgent, if not the paramount, questions to consider is, What shall be the minimum standard of requirements for admission to practise upon which all the states can agree?

Confessedly there ought to be common ground upon which we all may meet as a basis upon which to build an enduring superstructure—one that shall embody all the essentials of a superior medical education.

At a period of time when the republic is taking its place in the

1. Presidential address delivered at the ninth annual meeting of the National Confederation of State Medical Examining and Licensing Boards, held at Columbus, Ohio, June 5, 1899.

front rank of nations, when it is putting on the vestments of strength in all that pertains to greatness in state craft, as well as in military and naval prowess, when an American admiral is receiving the homage of the world for heroic action in the far east,—for a sturdy valor that in a single day added an archipelago to our national domain and delivered 9,000,000 of people from a thralldom more oppressive than barbarism; this, I repeat, is not the time for taking backward steps in any respect, least of all in matters pertaining to medical education.

It is a matter of congratulation that since our last meeting much progress has been made in perfecting methods of teaching in the schools, as evidenced by lengthened terms and the exacting of higher preliminaries in many of the states. But it is to be regretted that here and there some lingering indications of unrest appear, and that in a few instances the states are looking if not stepping backward.

It is not my desire to particularise, but I am sure that all will agree that the recent amendment, adopted by the legislature of Tennessee, exempting the graduates of schools within its borders from examination is to be regretted. In New York, too, a bill passed both houses of the legislature last winter exempting those medical officers that served in the war with Spain from the preliminary requirements that apply to others. But our sturdy common sense governor declined to approve of it, thus saving us the humiliation of weakening our wholesome statute.

In a former discourse I had occasion to speak of the alertness necessary to be exercised by the friends of state control to prevent the passage of insidious amendments to existing laws. Interested persons, designing men, adventurers and lobby fiends are lurking about legislative halls, with a constant design to undo or weaken the bulwarks that have been erected against ignorance and quackery. Now, more than ever, vigilance seems to be required to prevent the machinations of these aberrant forces that, singly or combined, would work havoc with our system. There is at present a tendency to overlegislate, and it is becoming almost more difficult to prevent too much or too dangerous legislation, than to obtain adequate or needful action by legislators. It has always been a great mystery to me why it is apparently easier to get the ear of a legislative body for improper or needless work, than for such as would improve the body politic; why an inconsequential subject or an irresponsible person seems to possess greater attraction for the average "mem-

ber," than well-considered bills offered by persons who are entitled to credence, or to those that spring from official sources ! !

It is getting to be the work of humiliation for a busy physician in respectable standing to approach his "member" in the interest of the people. He frequently gets a curt answer or an intimation that the aforesaid member is very busy with his own or other affairs. To approach a legislative body in session is an expensive affair, involving loss of much time, costly and dangerous travel, and the payment of princely hotel bills. Doctors are not likely to meet such conditions with grace or unruffled feelings, hence they let many things go by default rather than be subjected to such humiliation. These are perhaps some of the reasons why we are confronted in some of the states with retrogressive legislation.

Do not misunderstand me: there are very many good conscientious public men—industrious and honest legislators—who would be the last men to do individual wrong to a constituent, no matter how humble; but with a legislature as a whole when in session, with its never-ending list of rules, its parliamentary tactics, and its mysterious committees, it becomes quite another thing. The individual member is lost sight of in the grouping of the whole, and his vision is less acute or his sensitiveness more obtunded than when at home. This is not said in a spirit of criticism or disappointment, for, by and large, perhaps personally I have fared better than I deserved, when I have had the temerity to approach either single members or legislative bodies in session. In these remarks I have merely endeavored to point out an evil that confronts us, and to make of it an argument for united and forceful effort to hold the ground we have occupied as well as into press forward into new territory. In other words, let us permit no retrogressive legislation in those states that already have wholesome laws controlling medical licensure; furthermore, let us do our utmost to stimulate the enactment of similar statutes in states and territories where none, or at best, inadequate laws exist.

This brings me again to the consideration, for a moment, of the recognition by each state of licenses granted by others. Undoubtedly, it would be most desirable if all the state licenses were interchangeable or interindorsable, for then a license of any state could roam all over the country with a free lance. It so happens, however, though twenty-eight or more states grant licenses, that no two have, in all respects, equal standards. Some of them merely visé a legal diploma; others examine only candidates that have no diplomas; still

others require no preliminary education; while a few grant licenses only to those who give proof of preliminary education, three or four years of medical college teaching, and a diploma.

As a remedy it has been proposed in certain quarters to abolish state examining boards and establish in their stead a national board; but a moment's thought will convince any reflecting mind of the impracticability, not to say impossibility, of carrying out such a scheme. The states will not surrender the right to make their own police regulations, nor will the general government deprive the states of their vested constitutional privileges.

The real remedy consists in establishing uniform standards of requirements in all the states. This should embrace the triad—preliminary education, medical collegiate training, and state examination for license. It would not, or at least ought not to, be difficult for the states to determine that a high school diploma, or its equivalent, shall be the minimum of preliminary requirement; and that without this the schools shall not receive students. Colleges should then be required to establish four years' courses and finally, a state examination of uniform standard in all the states, no candidate to be admitted to it unless he presents a diploma from a school recognised as maintaining the proper preliminaries for admission.

A national clearing house made up of representatives from the several states could pass upon or visé the diplomas of such as desire to change states—such visé to entitle a diploma to registration in the state in which its holder desires to take up residence. While there are many opinions on this vexed question, most of which are made up from special cases of so-called hardship, there really remains but one equitable solution of the problem, and that is for the several states to establish uniform standards of preliminaries, collegiate courses, and state examinations.

The character of the examination imposed by the state has been the subject of criticism. One critic would ask simpler questions; another would make them more severe; still another says the questions are too bookish, or are not practical in character; yet another would institute a clinical or bedside examination in the hospital wards; while a fifth would have us divide the examination, making an undergraduate test at the end of two years in anatomy, physiology and chemistry. It is easy to find fault, but difficult to attain the ideal. The fourth proposition is well-nigh absurd because, first, it cannot be carried out; and, second, it is unnecessary. We are examiners not teachers, and our province is simply to determine the

nature and value of the instruction candidates have already received and whether it adequately fits them to practise. These latter reasons will apply equally well to the proposition to divide the examinations.

Heretofore, an American diploma has had no standing abroad, and the holder could obtain no privileges under it; whereas, the possessor of a foreign diploma could come to our shores and practise with a free lance, not even saying 'by your leave?' Under the present system all this will be changed. A New York or an Ohio license will be recognised in Europe else a European license will not be recognised in New York and Ohio.

I am well aware that the propriety of establishing so high a standard of preliminaries as proposed has been questioned in some quarters, notably in the southwest. It has been there suggested that in the mountainous regions of some of the states a high order of education is not required; that if it is established the inhabitants there will be deprived of medical aid because educated men will not settle among the mountaineers; that medical colleges cannot obtain support with such standards at their thresholds, and that for these and similar reasons a lower standard should be permitted. I am sure no one in this presence will admit the force of such arguments. For instance, shall the State of Ohio undo its great work of the past and let down the bars to ignorance and greed? When states are modeling legislation after that already established by some and are even creating systems of a higher range, it would appear unwise to "crook the pregnant hinges of the (our) knee, where thrift may follow fawning," to gratify a few who wonder if it is proper to shut the doors against those of inadequate early training.

Come with me for a moment into the regents' office in the Capitol at Albany and let us examine the records. Among the examination papers there on file we will find the following exhibition of gems :

Funic shueful for funic souffle.

Placental shuffle for placental souffle.

Umbilicle scoffle for umbilical souffle.

Umbilikes and umberlicus for umbilicus.

Apetate for appetite.

Sluffing for sloughing.

Coxix for coccyx.

Buttix and buttex for buttocks.

Dessigna seretena for decidua serotina.

Cureate for curette.

Profolaxis for prophylaxis.

Insission for incision.

Sillia for cilia.

Fetted for fetid.

Disisses for diseases.

Physition and phesicean for physician.

Oxiput for occiput.

How would any person in this presence enjoy the professional services of one of these "physitions?" These are only a few specimens of illiteracy to be found in the regents' medical archives; they are taken at random from a few recent examination papers of candidates who, let it be remembered, hold college diplomas, as otherwise they would not have been admitted to the examinations. Moreover, they may be regarded in a certain sense as the selects or cream of the applicants for license, as the practice law has reduced the number of candidates who annually apply, to a number very much less than that which was registered each year under the old system.

I have purposely omitted all words from this list not pertaining to medicine. Had an attempt been made to give illustrations of strictly English orthography, I fear you would have deemed the record almost apocryphal, if nothing worse.

It is deemed essential everywhere that a physician shall be a gentleman. How can he obtain this dignified position and be entitled to be so classified unless he is educated at least to the extent contemplated by the report of your Committee on Minimum Standards?

A leading medical journal¹ has lately presented in its editorial columns a timely setting forth of several phases of this important subject. I cannot bring this address to conclusion more profitably than by quoting a few paragraphs therefrom. This writer says :

Those whose task it has been to read and mark medical examination papers must have often noted the lack of literary ability displayed by some students who have a fairly good comprehension of the subject. These are papers where to award one due merit is a severe trial.

It is a question whether great illiteracy—though coupled with a fair knowledge of the subject—should not at once doom the candidate to rejection. A junior or senior should, we think be sent back to the study of his spelling-book, grammar and dictionary, who in answer to the question : "What is an abscess?" replies, "An abscess is a colecshun of puss in a circumscribed cavity." A candidate for the degree of M. D., who spells inflammation with one m; suppuration, supperation; capillaries, cappillaries; bacillus, baccilus; and even blunders just as badly with common English words, and who can hardly write a sentence grammatically, cannot be expected to honor the learned profession to which the diploma of a medical school gives him admission.

1. Boston Medical and Surgical Journal, June 16, 1898.

It may be said that these are very exceptional instances, but there are examiners in some medical schools who would be forced to admit that they are too common. It is from just this illiteracy and ignorance that our leading schools of medicine have obtained or are trying to obtain emancipation. It cannot but be admitted that the standard of medical education in this country is advancing. This is first of all apparent in the greater thoroughness of the matriculation examinations. The grossly illiterate must and will be excluded. Those medical schools (and they are too few) that propose to make matriculation dependent upon the possession of a degree of arts, (or its equivalent) have taken a step in the right direction. Moreover, through affiliation with the Association of American Medical Colleges, many schools have raised the grade of requirements, both of matriculation, and of the entire curriculum; and there is always a noticeable feature of progress in the fact that a four-year course of study is being very generally adopted.

Concluding these somewhat rambling remarks, permit me to suggest that it would seem apparent from what I have said that the proposition with which I started—namely, that the most important question with which we are confronted assuredly is, What shall be the minimum standard of requirements for admission to the study and practice of medicine?

I trust the answer will be made in the adoption of the report of the committee to be presented today for the action of this body.¹

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OCULIST VS. OPTICIAN.—A PROTEST.²

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A RECENT advertisement in the daily newspapers of an optical concern setting forth the wonderful work they were doing in the line of refraction and proclaiming the fact that many physicians were sending them patients, determined me that time for a protest was ripe. This is rather a delicate subject for an oculist to handle as his motive is liable to be misconstrued, but I think all will acknowledge the necessity of it, and I hope that after this short paper, and the discussion which I trust it will bring out, its importance will be more fully understood.

Just as the medical profession has its quacks, the optical business has its charlatans. They pursue the same methods, and their object is

1. The report, published in the August edition of this journal, page 25, was adopted by a unanimous vote.—EDITORS.

2. Read at the semi-annual meeting of the Medical Society of the County of Erie, June 13, 1899.

the same: to extort money from their dupes. Judging from this advertisement at least one of these concerns has been able to use members of the medical profession as tools in their nefarious schemes. Why this is so, I am unable to answer. We can easily understand how a person possessing no knowledge of this subject can be enticed by their unwarrantably pretentious advertisements and for the sake of economy to give them a trial, but how an educated physician, who is acquainted with the wonderful anatomy and physiology of the eye, can refer his clientèle to them is beyond my comprehension. Lest I may be misunderstood, I would like to go on record here as saying, that educated opticians, as a rule, do not belong to this class. Their business is the grinding of lenses and proper adjustment of frames. These men receive and fill prescriptions of the oculist. They bear the same relation to him that the prescription druggist does to the general practitioner of medicine. The others, the so-called graduate opticians, the sight specialists, and the like, may be placed in the same class as the counter-prescribing druggist.

The fact that patients go from the general practitioner to the optician may be due to carelessness. The physician tells a patient who is suffering from headache that he ought to have his eyes examined. Left to himself to choose, he is probably not acquainted with an oculist, and goes to the optician. Such a case came under my notice not long since. A man suffered from asthenopic symptoms, had been told to have his eyes examined and went to an advertising optician, who prescribed weak concave cylinders. Upon examination I found he had no appreciable refractive error, but suffered from a weakness of the internal recti muscles. In this case the glasses, as would be expected, really intensified the symptoms. Again, this may happen from the desire of the patient to escape the fee of the oculist. This is false economy. In the majority of cases the relief, if any is obtained, is but temporary. The oculist is consulted later. He finds it necessary to change the lenses and possibly the frames. Thus the patient must purchase at least two pairs of lenses.

Quite recently I saw a case of this character in which the optician prescribed a pair of lenses which were absolutely of no use. She was a poor girl and I sent her to him with a request that he exchange her lenses for those I had prescribed. He informed her that the glasses he fitted were correct, that the lenses ordered were so different I must be mistaken, and if she wanted them she would have to pay him \$2.00. She went to another optician, had the prescrip-

tion filled and has since been comfortable. I mention this case to show that these merchants are not wanting in assurance.

Frequently these patients are suffering from deep-seated trouble, which can only be detected by a physician. Such a man recently consulted me wearing a pair of glasses, sold him by an optician, for the relief of headache. The cause of his trouble was a neuro-retinitis, affecting both nerves and due to syphilis. Another man came to my dispensary service suffering with an iritis, for which glasses had been prescribed. Many more cases illustrative might be cited, but these will suffice for my purpose.

These tradesmen know nothing about the diseases of the eye, as can be determined from the foregoing cases, and oftentimes commit errors which result in harm. In both of the cases referred to the eyes needed rest. In place of this they were wearing illy fitted glasses, which if anything increased the work of their eyes.

In regard to their ability to substantiate their claims, let us concisely consider what is meant by an anomaly of refraction. A normal eye is called emmetropic. Such an eye at rest is so focused that parallel rays of light striking it are brought to a point on the retina. Hypermetropia and myopia are usually axial and as such we will consider them.

A hypermetropic eye is one in which parallel rays of light are brought to a focus back of the retina. This in comparison with an emmetropic eye would be of shorter axis. The correction is made in supplying the convex glass, which will bring the focus on the retina.

The myopic eye is just the opposite of the preceding. It is a long eye, by many claimed to be pathological, and parallel rays of light are brought to a focus in front of the retina. It is corrected by the concave lens, which carries the focus back to the retina. These anomalies may or may not be complicated by astigmatism, a condition in which a point as a point cannot be brought to a focus on the retina. In the foregoing the eye is supposed to be in a state of rest—static refraction—and if it remain so correction would be an easy mechanical matter.

But there is another form of refraction, called dynamic. This is produced by the action of the ciliary muscle. It is due to the action of this muscle that we are able to accommodate the eye for near objects. It is this muscle which conceals hypermetropia and changes it frequently into apparent myopia. In the great majority of cases, especially those under forty years of age, in order to determine

positively the refractive error, this muscle must be paralysed by the use of a mydriatic. I am aware some men claim that by the use of the ophthalmoscope, ophthalmometer and test-types this becomes unnecessary, but these men will have to admit that after using these tests they are uncertain as to the absolute error of refraction.

A few years ago a committee appointed by the American Ophthalmological Association reported that the best objective test for determining the refraction of the eye is the shadow test. That this will not bring out the total error without a mydriatic I know from personal experience, for I have several times observed the refraction change during mydriasis at different stages of paralysis of the accommodation.

These so-called specialists consider the eye as an optical instrument and forget that it is subject to physiological laws. They are not aware that even in moderate degrees of refractive error, while each eye may be corrected so that it has normal vision and a normal amount of convergence, thus working normally, still the coöperation of the two is found to be more or less hindered, and that accommodation and convergence are intimately connected and can be dissociated only within certain limits. On this subject Landolt says :

That however intimate the relationship between the doctrine of ocular refraction and physics, we must be careful not to consider the former from a too mathematical point of view. Although we may establish rules, exceptions to them are numerous and figures cannot often lay claim to greater authority than those of physiology in general. We shall succeed just as much better in adopting eyes to what they are destined to accomplish, in proportion as we associate more closely perfect knowledge of theory with the most careful clinical observation."

To sum up, we have in our midst men posing as expert refractionists who by their work show they are not even good mechanics. They charge extortionate prices, presumably for glasses, but in reality for their advice. They prescribe glasses when the eye is diseased and thus do a positive injury. They claim the correction of refractive anomalies is mechanical and belongs to them. I believe this work comes under the domain of ophthalmic surgery, and beg to suggest that our board of censors take this matter up and with their attorney determine whether or not these men are to continue practising an important branch of the science of medicine.

A NOTE ON ARECOLINE.

By J. C. CLEMESHA, M. D., M. R. C. S., Eng., L. R. C. P., London,

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ARECOLINE is one of the alkaloids found in the areca nut, the seeds of the areca catechu. Taken internally it causes vomiting and diarrhea and will be found useful in obstinate constipation from its action on the contractility of the intestine.

According to Frohner, arecoline is a sialagogue of the first rank, which is not only comparable to pilocarpine, but even exceeds it. Salivation occurs in about five minutes after its injection and attains its maximum in half an hour. Martin employed this drug as a teniafuge, using sixty grains of the powdered areca nut to obtain the desired effect and he observed the absence of colic.

The bromohydrate of arecoline is a white crystalline soluble salt, and when applied to the eye in the form of a one half or one per cent. aqueous solution, causes contraction of the pupil. A one half per cent. solution dropped into the conjunctival sac causes burning and slight conjunctival congestion. In from three to five minutes the pupil begins to contract and reaches its maximum in from ten to fifteen minutes, accompanied by spasm of the ciliary muscle. The maximum effect remains for a quarter of an hour or so, after which the pupil gradually returns to its normal condition. This is usually in the course of an hour or two.

The tension of the normal eye does not seem to be affected by it, but in cases of glaucoma, clinical results show this drug to be the equal of eserine.

Bietti observed that it appeared to act more promptly and more energetically than eserine, but that its effect was of shorter duration.

Finally, it keeps well in solution, retaining its active properties unchanged for an unlimited period.

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TO REMOVE THE ODOR OF IODOFORM.—Dr. Edwin Ricketts, of Cincinnati, says: "To do away with the 'smell' of iodoform that comes to the hands of the surgeon for handling it, I find that to rub on, after use of soap and water, a teaspoonful of vinegar (found in every household) does away, promptly, with the very disagreeable odor.
—*Lancet-Clinic*.

Selections.

HISTORY OF OPO- OR ORGANO-THERAPY.¹

By ROSWELL PARK, A. M., M. D., of Buffalo, N. Y.

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[From St. Louis *Courier of Medicine* for August.]

HOW little new there is under the sun has been subject of frequent comment by students from time immemorial. That this may apply equally well to the general subject of opo-therapy or organo-therapy, can easily be made to appear. Those of us who are now using the various animal extracts, having begun to use them because we were advised so to do, have little idea of the real history of the subject or of the method, either by which they came into use or by which they have come to be given in their present form. And so it has occurred to me that an historical review of this subject would not be without its present interest and importance, and for this purpose I have availed myself of the studies published by Hopf, and published in the current issues of "Janus" (*Zur Geschichte der Organo-Therapie.*)

Although one can scarcely trace the use of our present elegant pharmaceutical preparations back to the crude use of various parts of animal bodies from prehistoric time, it is hard to say just how largely present methods are due to prevalent superstitions and popular notions or to definite laboratory and experimental investigations. It will probably appear to you that they are due to both.

Of the four ancient Egyptian Papyri which concern the practice of medicine, the so-called *Papyrus Brugsch* is the principal one which has been carefully gone over, and from which we are as yet repaired to draw conclusions. This, with the *Papyrus Ebers*, furnishes us abundant illustration of the reliance placed in those ancient times upon, for instance, the viscera of animals and the excrement of the gazelle as powerful remedies for that condition of the eye which we must suppose to have been the Egyptian ophthalmia. Various animal secretions and excretions were recommended in this work, particularly for maladies of the eyes. Among others, it was advised to take a human brain which was to be divided into two halves. One half was to be mixed with honey and rubbed upon the eyes in the evening; the other half was to be dried, pulverised and

1. President's annual address to the Buffalo Academy of Medicine, June, 1899.

used upon the eyes in the morning. Blood of various animals was also supposed to be an effective medium for chemosis or edema of the conjunctiva, and the milk of a nursing woman was then, as often now, considered most effective. Ox gall was considered a good remedy for worms, as it probably is today in certain instances.

One would, perhaps, expect of so deliberate and accurate a thinker as Hippocrates, that these medicinal phantasies of the Egyptians would scarcely find a place in his writings; but even this great master of antiquity lent himself to popular belief in this direction, and milk of a nursing woman was an important therapeutic medium in his estimation. Among the dogmatists who followed Hippocrates there were those who recommended the decoction made by cooking young puppies in wine as a means of curing sterility in women; while various insects, beetles especially, were advised as emmenagogues. In the time of Erasistratus the brain of a camel was considered a most excellent remedy in epilepsy, as were also the testicles of a wild boar. In Rome, in the time of the Emperor Trajan, Archigenes recommended very highly the flesh of the viper. But it was Pliny, especially the elder, who seemed to have most trust in this sort of medication, and he called attention to the fact that many of the Greek physicians seemed to have a great faith in the use of certain of the viscera or parts of the body, even including the tips of the finger nails, after they had been cut off. He alludes to the fact that some eminent men attach great value to the skull bones of a criminal, and that Antaios, especially, advised pills made out of the skull of an executed criminal for bite of a mad dog. And then Pliny goes on to say that we cannot emphasise sufficiently how much we owe to the Romans in that they put a stop to this practise of even murdering men in order to secure from their bodies something which could be used as a remedy, such as the skull bones or the brains of little children, etc. It was not quite so bad when the medical men changed their practise to such an extent as to substitute the liver of the mad dog and employ it as against his own bite, or to recommend the liver or the juice of the same drunk in wine, or gall, especially from the gall bladder of the bear or the wild boar, or the dried or powdered lung from the same animals. Also the heart was supposed to be efficient in epilepsy, especially when taken from the animal in the first or the second day of the new moon, and particularly if the animal were a black male ass.

The spleen has almost vied in alleged power with the liver, and Pliny particularly recommended the spleen removed from a living

dog and, taken with milk, for affections of the same viscus. acknowledging, however, that the cow's spleen would probably answer as well. The stomach of the fowl cooked and taken in decoction was supposed to be good for pulmonary troubles as well as for intestinal affections. For kidney diseases the kidney of a hare or of the ass, taken with wine, was supposed to be peculiarly efficacious, as well as for stone in the bladder. In fact, we get here our forerunner of the isopathy of the last century, in that for bladder affections the bladder of the wild boar was recommended to males and of the wild sow for females. The testicle of a hippopotamus infused in water was recommended by Pliny as an effective agent against the bite of the serpent. So the female sexual organs of some of the animals were also recommended to women suffering from pelvic disorders peculiar to their sex, and for difficult labor the membrane in which a young goat came into the world was a sure relief, if taken in wine.

Blood, also, was supposed to have much the same virtue in those days as now, and Pliny regarded it as the most valuable of all these remedies from the animal kingdom. For instance, in dropsy, the blood of a goat was advised, while for pulmonary hemorrhages the blood of a young goat, drunk warm, with a equal quantity of vinegar, was a sure cure, as was also the blood of a wild ass for whooping-cough.

Entire animal bodies even were of reputed efficacy for certain affections. Thus, for the nocturnal incontinence of children it was recommended to give a boiled mouse, while the bodies of swallows, taken either fresh or burnt to ashes and drunk in water, were supposed to be good for headache and sore throat. Again, it was recommended to take twenty-one red flies in one potion for epilepsy. This is not so very widely different a practice from that of today, when the Spanish fly is still an accepted feature of our pharmacopeia. Against colic Pliny recommended the ashes of the hard portion of the hart's horn mixed with African snails, while snails alone were supposed to be good for cough and expectoration, especially when rubbed up raw in water. And so one might follow both the elder and the younger Pliny through an almost endless list of such measures as these, given in all seriousness and apparently with a firm faith in their efficacy. Later, under the Emperor Antonius Pius, Marcellus wrote a sort of poem upon the medicinal virtues to be secured among the fishes, and even the great Galen recommended kidneys of a certain fish as a positive aphrodisiac.

The Arabian physicians lent themselves to this same sort of belief in various forms, while the scholiasts of the Middle Ages did not depart from the teachings of Aristotle and Pliny. Gilbertus Anglicus (XIII. Century) earnestly recommended the flesh of the lion for fever and for stone in the bladder, as well as the blood of a young goat which had been previously fed upon certain herbs. Some people like Albertus Magnus, also during the XIII. Century, were outspoken in their faith in these remedies, and one in particular, Conrad, published a Book of Nature, which was little more than a repetition of the recommendations of Pliny. He advised the liver of the serpent in serpent bite and the flesh of the hart in fever, while lion flesh was good for chilling of the body. In asthmatic difficulties the flesh of the fox was to be eaten. Conrad's book had a large influence for two or three centuries, appearing in repeated editions. And even three hundred years later we find numerous disciples of his, especially in Germany, who were recommending all kinds of animal remedies for all kinds of disease. Even Paracelsus, reformer and reactionary as he was, could not quite get away from remedies of this kind.

In the organo-therapy of the Middle Ages, and in fact from the time of the Romans until the present century, the sexual organs of male animals have always occupied an important place in public esteem as means of rejuvenation and increase of vitality. When Brown-Sequard first introduced his testicular fluid, there obtained in it nothing of novelty, save the minute method of its preparation. In the New London Dispensatory, published by Dr. Salmon in 1684, it was stated that the external genitals of certain animals were good for sterility and various sexual weaknesses. Many different animals were used for this purpose. Especially was the testicle recommended when dried and drunk in wine. In this same connection Salmon recommended caviar as being especially nourishing and increasing virility.

These recommendations came with some force from a professional man. On the other hand, in 1702, there was published by Florinus a work with the title, 'The Wise and Intelligent Head of the Family. In this work were recommended various parts of nearly all the animals of Germany, as well as various portions of the human body. For instance, he advises the use of *cranium humanum preparatum*, made from the pulverised skull of criminals, for various affections, including constipation, although a much more effective agent for obstruction, according to Florinus, is the *oleum cranii humani*, which, however, must be made from the head of someone who has met a

violent death. Florinus frequently lapsed into poetry, and became particularly poetic over the virtues of the deer, five different portions of whose anatomy were supposed to have marked effect in various diseases. Florinus did not esteem excrement so highly as a therapeutic material as did one of his successors, Paullini, who published a book upon the subject in 1714, which was republished one hundred and thirty years later. Scatology was in this work given the importance, almost, of a system, which had all the repulsiveness of isopathy, or even more. However, if one wishes to realise all that scatology means, he should consult the work on this subject by Bourke, one of our own army officers. These gentlemen also recommended the brain of the squirrel for faintness and vertigo, and it is stated that the Alpine hunters of that time gave to their pregnant wives meat of the squirrel in order that they might bring boys into the world, as well as that these boys might not suffer from dizziness or fall into the valleys.

Another book of no little interest appeared in Brabant in 1800. It was a book of approved and tried remedies and of Egyptian secrets, for man and beast. It was known usually as the "Book of Secrets," for short. Among other recommendations was this for dysentery, especially of the bloody form: That one should take the short rib from a criminal who had been hung, powder it and give this to the patient in a glass of wine or of vinegar.

And so one might go on and show how from the earliest days even to the present, mankind have believed in many things which the better sentiments of the educated condemn, and with which we today view with disgust.

I have alluded more than once to isopathy as a most discreditable and revolting offshoot from homeopathy. It is generally supposed that isopathic practises were long since discontinued, and yet I have today in my desk a price-list of a New York dealer in alleged homeopathic medicines, which are practically isopathic remedies, and which include, for instance, drugs and measures of the character so far mentioned in this paper. It certainly should shock the honest and sensitive homeopath even of today to see advertised for sale at one of his pharmacies such remedies as pus from a carbuncle, blood from a menstruating woman, and the like. Yet these things are actually mentioned in this price-list and can be bought at this moment in New York, as far as I know, since the dealer's address can still be found in the directory, or could until very recently.

So much as has been thus far said has reference purely to the

crude and almost lawless method in which various parts of animal bodies have been employed in past centuries. It is introduced, however, merely to show that there was nothing new nor novel in the employment of any part of almost any animal body, but that it remained for modern scientists to study the action of these various substances, and show the way by which they could be occasionally employed.

And so it came about in the process of time that E. de Cyon presented a communication to the Paris Academy of Medicine, some years ago, upon the functions of the thyroid and upon the discovery therein of a certain compound in which iodine was plainly present, and which then, as now, bore the name of iodo-thyrine. According to Cyon it was the function of the thyroid to bring the iodine compounds in the blood into certain organic combinations, and in this way to remove from the nerve centers more or less dangerous and toxic substances. From experiment it appeared that iodine possessed paralyzing activities upon the pneumogastric and cardiac centers, while the iodo-thyrine formed in the thyroid seemed to have activity in controlling the contraction of the heart and the circulation of the blood. This function of the thyroid was so far separated from that of the heart as to be manifested only through the influence of certain nerves. Inasmuch as the heart under the influence of iodo-thyrine produced a well-marked dilatation of the thyroid vessels, it appeared that the thyroid itself acted as a mechanism for the protection of the brain from sudden vascular changes, either by opening wider the thyroïdal vessels or by increasing the amount of iodo-thyrine. Hence followed naturally the use of iodo-thyrine, particularly in cases of vascular and hyperemic goitre, as well again as in certain cases of thyroïdal atrophy and cachexia strumipriya. In spite of all these theoretical deductions, there were but few practical applications of iodo-thyrine, at least few reported in literature, up to the beginning of 1897. About this time Grotz presented to the Vienna Dermatological Society a case of psoriasis which had been apparently healed in four weeks by the use of iodo-thyrine. In various places the remedy came into general and rapid use, and results were reported from numerous foreign clinics. Thus, Hanszel reported to the Vienna Clinical Society 220 cases of struma which had been treated in the outpatient department during 1896. About this time Merck put on the market tablets of thyroïdin, whose use was followed by benefit, especially in the parenchymatous form of goitre, or even in the cystic form, but which seemed to be of no efficacy in the vascular

form. While in many cases they were efficacious, a complete disappearance of the struma following their use has at no time been reported.

In exophthalmic goitre, also, thyroid preparations came to be generally tried, and even iodo-thyrine was used, although the indication for its employment was by no means very strong. Results were very contradictory, and even now one can form no positive judgment as to the effect of these preparations in such cases, every resort to them being in the nature of a judicious experiment. In 1896 also, Ewald summed up the matter before the congress of German physicians in Wiesbaden, when he said that the desirable results of thyroid medication seemed most conspicuous in myxedema, cretinism and like conditions of early life, whereas the result in skin diseases and goitre was often disappointing, sometimes even injurious. In spite of Ewald's warning, men used thyroid preparations unscientifically and unfortunately, as, for instance, even endeavoring with it to treat deafness which was due entirely to sclerotic processes. Nevertheless, in ichthyosis and perhaps certain allied forms of skin lesions, thyroid preparations seem to be indicated, perhaps because of their effect upon the bloodvessels of the skin. In the parenchymatous goitres, and sometimes even in tuberculosis of lymph nodes, the drug seems to have a beneficial effect. So also in reduction of obesity and in the internal treatment of the uterine myomata, although in the long run it would be best in these cases to limit its use to the inoperable cases. Gautier has found benefit also from thyroid preparations in delayed union after fractures, basing his first use of the drug upon certain laboratory results on the effect of the thyroid upon the growth of the bones.

Referring again, for a moment, to exophthalmic goitre, it would appear from numerous experimental studies that the disease itself might be ascribed, at least to some extent, to what has been spoken of as hyperthyroidism, and that when by employment of thyroid preparations an atrophy of the thyroid body can be produced, its peculiar products or secretions are thereby diminished, its vascularity decreased and benefit thus brought about. There is, therefore, this contrast between Basedow's disease and myxedema. A certain warning should be given, however, in all of these cases, based also upon careful experimental studies, to the effect that the prolonged use of thyroid preparations may produce a glycosuria of alimentary origin, and this makes it particularly wise to abstain from such preparations in diabetes.

Traczewski studied this subject in another way. He removed thyroids from animals and then fed them exclusively with animal food, and found that it had a very unfavorable effect upon them. He tried also the effect of the salts of phosphorus, particularly of sodium phosphate, upon these animals, and especially upon those in which he had left a portion of the thyroid, and found that these salts produced marked cachexia and finally atrophy of the remaining portion of the thyroid body. He found also the converse of this to be true, and thus we have a definite physiological and experimental basis for the employment of sodium phosphate in Basedow's disease. This tallies exceedingly well with the known clinical advantages of its exhibition in this malady.

A curiosity pertaining to this line of study is the attitude taken by Monk, who has been one of the most ardent students of the whole problem. In spite of all that laboratory investigation and clinical experience have shown in regard to the functions of the thyroid, and the effect of the thyroidal preparations demonstrated experimentally, he denies the presence of toxic substances in the body after removal of the thyroid, as well as that the peculiar symptoms due to its removal can be in any way combated from without. He claims that half of the animals from whom he has removed the thyroid show no unpleasant effects, and that myxedema is one of the rarest of post-operative phenomena. How completely he differs in these respects from some of his colleagues it is not necessary here to emphasize.

The next noteworthy effort in this direction was the now well-known, and then widely published attempt of Brown-Sequard, to extract from the testicles of animals a material which should so far influence nutrition and affect vitality as to rejuvenate the senile. There probably is no doubt as to the earnestness of the originator of this method, but the sensational aspects of the whole affair were so pronounced as to rob it of most of its value and almost immediately bring it into disrepute. And so it happens that today the testicular extracts and preparations are probably less used than those of any other organ or portion of the body. This may be the fault of their preparation, and may also be the result of the method of their introduction to the profession.

Much more scientific value seems to pertain to ovarian extracts, which were introduced about three years ago. One of the famous manufacturers puts these preparations on the market in three different forms; an extract of the entire ovary, an extract made from the cortex and a precipitate made from the contents of the ovarian

follicles. They are recommended especially in cases of post-operative amenorrhea where serious disturbance has followed the removal of the ovaries, such as headache, sleeplessness, cardiac disturbance, and the like, and, in fact, in some of these instances of so-called cachexia ovaripriva they appear to have been of considerable value. Even in such rather indirect conditions as chlorosis, irritable bladder, etc., they seem to have exercised a beneficial influence. Most of the ovarian extracts made today are made from the ovaries of calves. Seligman, indeed, has warmly advised the use of these remedies in certain nervous disturbances connected with the climacteric and in rosacea of the face. They have also been lauded in certain cases of exophthalmic goitre in women.

While we have long had in our hands preparations like pepsin, ptyalin and pancreatin, which were supposed to contain peculiar digestive ferments, the preparations of an extract of the entire pancreas, akin to that of the thyroid for instance, has been a theoretical novelty of the present decade. It being well known that many cases of diabetes appear to be due to primary disturbance in the pancreas, H. Mackenzie suggested, in 1893, the use of pancreatic extract, and reported the best of results from its employment. His suggestion was quite generally followed, and McNamara went so far as to suggest the use of raw pancreas as a rectal suppository; while Watson Williams advised the implantation in the tissues of a portion of a fresh gland. He lost one patient three days after such an operation. He ascribed the death in this instance to the fact that the gland was removed from a sheep which had been chloroformed, and whose blood was subsequently altered. But this explanation would seem too far-fetched. In 1895 Grube made careful investigations with alcoholic pancreatic extracts, and claimed as the result of his studies that it did influence the cause of cases of diabetes, but that it was without influence upon the elimination of sugar. As a result of these investigations, as well as of those made by Hugoneng and Doyen among the French, it would appear that the glycolytic effect of pancreatic extracts is uncertain, and that the extract itself appears to be, like iodo-thyrine, a more or less unstable substance. And so, of late, we have heard very little of these materials being used for diabetes.

Preparations from the heart muscle were early suggested, and came into early employment, yet have failed to attract very much favor. About the first to use them was Onimus, who employed heart extract by subcutaneous injection in cases of cardiac failure. Hammond also, in this country, took up the subject, although his employ-

ment of preparations of this nature has given very little impetus to their general introduction. It would appear that in some cases, however, cardiac tonus has been increased—even that there has been an increase of red corpuscles as well as of the elimination of urine.

In 1898, Onimus recommended the use of extract from the spinal cord, which he proposed to use in certain central diseases, such as myelitis, bulbar paralysis, diabetes, etc. Two years later came into vogue an extract of brain matter (so-called cerebrin) with which the name of Hammond is in this country connected. Its use by injection was recommended in severe nervous prostration, neurasthenia, migraine, hysteria and epilepsy. Success with its use was also reported in chorea, but the remedy does not seem to have won any lasting place in organo-therapy.

Much more widely and favorably known is extract of bone-marrow, whose use in pernicious anemia and certain allied affections seems now to be quite general and well merited. In certain cases, for instance, of pernicious anemia the number of red corpuscles has been apparently quadrupled by its administration, and the proportion of hemoglobin raised from 25 to 80 per cent.

It was but a natural step from bone-marrow to the spleen as a blood-making preparation, since physiology teaches us that marrow and spleen both have a great deal to do with elaboration of the blood. Splenic extract seems especially indicated in anemia, and chlorosis, as well as in the cachexiæ of such chronic poisoning as malaria, etc.

Adrenal extract is the natural outcome of the fact that the adrenals are apparently intimately concerned in the causation of Addison's disease. My colleague, Dr. Stockton, has cured, I believe, cases of Addison's disease with this preparation. Senator was among the first to observe benefit by prolonged administration of this remedy. Mankowski, and other Russian observers who have been studying the subject for a long time, agree that this particular preparation possesses powerful stimulating properties upon the cardiac and respiratory centers. Most interesting is their observation that by the injection of adrenal extract into the veins death from what would otherwise be lethal amounts of chloroform is prevented. Even one or two cc. of a 1 per cent. solution will bring this about in animals. Powerful as this agent is, in this respect it is, nevertheless, by itself one to be used with great caution, and it is not likely that at present at least, it will come into any general use for this purpose. Fuerth succeeded, after some 2,000 endeavors, in separating the peculiar active ingredient in the adrenal which gives to its extract

these peculiar properties. It seems to be contained within the pigmentary portion of the organ. Given internally it increases blood pressure very notably, while externally it has more or less local astringent effect. The astringent effect of these preparations has also been taken advantage of, first in this country by Bates, who recommended the employment of solutions of adrenal extract in ophthalmology. In my own experience I have found them to be possessed of remarkable astringent properties, their effect upon exposed mucous membranes being almost instantaneous.

Aside from the extracts made from suprarenals, we have also those made from the kidneys themselves; which have been used in contracted kidneys, calculous nephritis, etc. Some of these preparations have been glycerine extracts; others are made in solid form. Under their use in some cases albumin has disappeared and toxicity has returned to the urine.

Aside from the preparations already spoken of, there have been placed on the market, by various foreign and domestic firms, tablets or extractives made from the liver, from the lymph nodes, the mammary glands, from the parotid gland, from the prostate, the thymus and even from the uterus. There have also been prepared extracts from the pituitary body and the muscular structure of the Fallopian tubes. From the bronchial nodes have been prepared substances called pulmonin and glandulin, the former being made also from the lung substance proper. In fact, the advocates of organo-therapy, like those of other novelties, have gone wild in their enthusiasm and their determination to find in these materials remedies for all diseases. The pendulum has, undoubtedly, swung altogether too far in this direction, but it will gradually return to a position of stability and rest, and when it has reached that point we shall undoubtedly find that in certain of these animal extractives there inhere properties of no small value, of which the judicious physician should willingly avail himself.

SURGICAL COMPLICATIONS OF TYPHOID FEVER.¹

By HUGH M. TAYLOR, M. D., Richmond, Va.,

Professor of practice of surgery, University College of Medicine; surgeon to Virginia Hospital, etc.

[From the *Richmond Journal of Practice*, July, 1899.]

WHAT hope does surgery offer patients seemingly or really doomed by the occurrence of typhoid perforation? It is claimed by Murchison that 90 per cent. to 95 per cent. will die.

1. Read before the Richmond, Va., Academy of Medicine and Surgery, July 11, 1899.

For our part, we are forced to think that a majority of the small number supposed to have recovered spontaneously were cases of mistaken diagnosis,—cases of local peritonitis without perforation. Granting, for the sake of comparison only, that Murchison's claims are correct, and that from 5 per cent. to 10 per cent. of suspected perforations will recover spontaneously, a knowledge of the triumphs of operative surgery in this field leaves no doubt as to its efficiency.

Dr. Keen² reduces the authenticated cases operated upon to 60, with 13 recoveries. Since the publication of the above statistics, I have had one case to recover after operation and one to die. This last mentioned case occurred only a few days ago. The young man had been sick with a typical enteric fever for six weeks. For the past week his case had been complicated by retention of urine, induced by a specific urethritis contracted just before he was taken sick with the fever. For a week it was necessary to catheterise him at regular intervals. At 10 a. m. he was doing well—pulse, 108; temperature, 104; no pain; no abdominal distension; morale good. At 10.30 he had a movement from his bowels and passed his water for the first time in a week. Immediately he complained of a sharp abdominal pain diffused over the whole abdomen. I saw him two hours later; an anxious expression, thoracic breathing and clammy skin were noticeable; his abdomen was flat, but rigid; his pulse 130, and temperature 105, and there was absolute abolition of peristalsis. This last-mentioned symptom was carefully looked for by placing first the ear and then a phonendoscope over every part of the abdomen.

The sudden onset of pain, rigid abdominal muscles, thoracic breathing, abolished peristalsis and increased pulse rate were the evidences which warranted me in diagnosing a perforation, and in ordering immediate preparation for celiotomy. There was no appreciable shock; no abdominal distension; no lessened area of hepatic dulness, and no reduction of temperature. In two hours from the time I saw him, and four hours from the onset of symptoms, I made a median section. On incising the peritoneum, a quantity of bile-colored serum and fluid feces escaped, but no gas. On delivering the cecum and last part of the ileum, two large perforations were found within about twelve inches of the ileo-cecal junction. The perforations were about four inches apart, both involved the free margin of the bowel, and were both ugly-looking lesions. The largest was almost as large as a silver quarter and the smaller as large as

2. Keen, *Surgery of Typhoid Fever*, p. 227.

a dime. For some distance around the larger the tissues were thickened and indurated to such an extent that a resection was seriously considered. Both lesions were, however, closed by deep and superficial sutures. Prolonged irrigation, washing and wiping of intestines and cavity, was practised. (Even in this short time—four hours—membranous flakes were deposited around and near the bowel perforations.) Gauze drainage was freely used and the abdomen closed.

Although not more than fifty minutes were consumed in the operation, the patient reacted badly, and at least two quarts of hot saline were administered under the skin and hot coffee and whiskey by the rectum, together with morphine, strychnia, digitalin, camphor, etc., hypodermatically. During this condition of shock he sweated profusely. Six hours after the operation the house surgeon reported that he had used the catheter, but had only found a few teaspoonfuls of urine in the bladder. This surprised me, in view of the quantity of hot saline left in the peritoneal cavity and the quantity administered under the skin. I instructed that the catheter be used every three hours, and this was done until his death, which occurred nine hours after the operation. In that time not more than a tablespoonful of urine was secreted. As far as I can tell, this patient died from suppression of urine, probably traumatic in origin, and aggravated possibly by acute gonorrheal infection. A post mortem found the peritoneum dry and no increased evidences of peritonitis. The result of this case was a great disappointment, as operative intervention was undertaken within four hours from the first onset of the symptoms, and I counted myself as being exceptionally fortunate in getting into the abdomen early, and equally so in completing the operation in a reasonably short time.

Seven months ago, I met with a case of perforating typhoid ulcer equally as interesting, and more so, in that the diagnosis was made under more obscure manifestations, and the operative intervention was successful. This case has been reported in several journals as a part of a clinical lecture. According to Dr. W. W. Keen's statistics, this success made 61 operations, with 14 recoveries. I am sorry since my experience within the past few days, the table will have to read 62 operations and 14 recoveries.

A little boy had been sick with a typical typhoid fever for six weeks, had been convalescent for ten days, again had fever for two weeks, and again was free from fever for several days. He was reported to have passed a comfortable night, but awoke early complain-

ing of some pain in his abdomen, and had an action. His mother, thinking he needed it, gave him a teaspoonful of syrup of figs. This was, however, promptly vomited, and several times during the next few hours spells of vomiting occurred. One more attack of sharp pain, which lasted only a few minutes, was experienced, and after that time the child insisted that he was all right and had no pain.

Such was the report given on my visit at 11 o'clock—four hours after the first attack of pain—and, I, of course, recognised suspicious symptoms of intestinal perforation. The child, however, did not look sick enough at that time to justify such a suspicion. He expressed himself as being without pain, and his untroubled countenance confirmed this assertion. There were no evidences of shock, and those who saw him at the onset of the sharp attack could not say that even then he presented any of the symptoms of shock. His pulse was now 115, and his sublingual temperature 101 degrees F. Respiration was not noticeably increased, and his morale was exceptionally good. There was, however, some appreciable rigidity of the abdominal muscles.

An absence of fever for several days, the sudden onset of pain and vomiting, a recurrence of fever and rapid pulse, plus the abdominal rigidity and abolition of peristalsis, was the group of symptoms which made me fear perforation. *Per contra*, was the short, sharp attack of pain and peristalsis, incident to having an action. Was the vomiting due to acute indigestion and the dose of syrup of figs? Was the fever and increased pulse rate a product of ptomaine production and absorption within the intact intestinal tract? Was the muscular rigidity voluntary contraction incident to the fear of pain, or from real pain due to an irritated peritoneum? It is common experience in typhoid fever to have pain without perforation; tympanites is the rule, not the exception, while tenderness on pressure, notably in the ileo-cecal region, is commonly experienced. Time and again I have viewed with anxiety just as typical symptoms of perforation as these mentioned, in which the results showed no perforation to have occurred. I am dwelling so minutely on the symptoms manifested to impress the fact that perforation may coexist with very minor early manifestations, or, in fact, as has been observed by others, with no symptoms at all, and to impress the idea that what is needed in this phase of abdominal surgery is an improved diagnosis, rather than an improved operative technique.

A second visit two hours later—eight hours from the beginning of the acute symptoms—did not lessen my apprehension as to the

serious nature of the case. There was no noticeable change, except that his pulse had increased to 125; his rectal temperature had fallen to 100.5 degrees. Twelve hours from the onset of the alarming symptoms there were more marked symptoms of serious intraabdominal trouble, but still classical symptoms were not conclusive. The face of the child was not expressive of impending danger, its respiration was not disturbed, hepatic dulness was not obliterated, vomiting was not at all frequent, pain and restlessness were not significant.

To offset these favorable indications, his abdomen was still to some extent rigid, and what was especially ominous, as it is in all serious intraabdominal infection, his pulse was now 140, while his rectal temperature was only 100.5 degrees. The increasing pulse rate and decreasing temperature suggesting ptomaine absorption from sepsis and shock and reduction of temperature incident to shock of sepsis, a confirmatory incision was agreed upon. I incised over the ileo-cecal region, because of the known fact that a large majority of typhoid perforations are found in the ileum within eighteen inches of the ileo-cecal junction.

On incising the peritoneum a quantity of sero-purulent fluid escaped from the peritoneal cavity, but no gas. The cecum was quickly delivered, and not more than twelve inches from the small bowel was examined before the punched out pencil-sized hole in the ileum was discovered. There was but little, if any, appreciable inflammatory change about the intestinal lesion. In fact, it looked as if a cobbler's punch had been driven into a healthy bowel. To close the opening with deep mattress and Lembert sutures was the work of a few minutes. The technique incident to wiping the bowels of deposits, irrigating cavity, applying drainage, and completing the operation in all of its details occupied only thirty minutes. This last fact is mentioned to impress the idea that the technique of dealing with typhoid perforations may in some instances be very simple and quickly completed. The ultimate outcome in this case was an uneventful recovery.

It may look like desperate surgery to subject to celiotomy the cadaverous looking patient ill with typhoid fever for weeks, with the added prospect of prolonged anesthesia and the like. Granting that it is formidable surgery, it is inevitable death without it, and it is criminal practice to withhold a means that has saved 14 cases in 62 operations in the face of an alternative that can offer no better result than a mortality of 100 per cent.

Colostomy During Typhoid Fever—Recovery.—A middle aged woman had been sick with enteric fever for four weeks. The case had been typical in all respects, except that constipation had been marked—so much so that high enemas medicated with ox-gall, glycerine, turpentine, peppermint water, etc., had to be used. This treatment had the effect of bringing into the lower bowel great masses of partially inspissated fecal matter, which had to be removed by the nurse with her finger in the vagina and rectum. There had been a great deal of tympanites, pain and hemorrhage and perforation was anxiously watched for. On Saturday evening her temperature was $103\frac{1}{2}$ degrees, pulse 108; general condition satisfactory. One profuse intestinal hemorrhage that night must have been fatal, but for the prompt use of subcutaneous saline, strychnia, etc., given by the nurse. The shock incident to this hemorrhage brought the temperature down to normal and ran the pulse up to 150. The depression continued for twenty-four hours. At the end of that time the patient's abdomen began to be markedly swollen, and high enemas were ineffectual either in inducing a passage of gas or fecal matter. In spite of all resources for her relief, the distension became so great and interfered to such an extent with respiration that death seemed a question of only a few hours. The distension was within the intestines and evidently mechanical, as we could notice through the thin abdominal walls coils of distended bowels, and there was exaggerated peristalsis. As a last resort, an enterostomy or colostomy was decided to be imperative, hoping thereby to empty the bowels, relieve the pressure, and tide the patient over the crisis.

An incision in the right inguinal region was made, the first knuckle of distended bowel presenting was delivered and fastened by safety pins in the incision. The bowel caught proved to be a loop of the ascending colon, and was securely fixed by two pins, passed transversely, so as to include lips of wound and bowel. No sutures were used, but gauze strips were packed around the protruded bowel to prevent leaking into the peritoneal cavity. The bowel was then incised transversely to its long axis, and a drainage-tube (large size) introduced, with the bowel opening on the stretch, and secured by a safety pin, including bowel and tube. The technique was so simple, and so quickly done, that no shock, either from the general anesthesia or operation, was appreciable. As is usual in such cases, there was not the great outpour of gas and fecal matter one would expect; but, by flushing the bowel with saline, a free discharge of

gas and fluid feces occurred, with almost immediate relief to the patient. Frequent lavage of the bowel also had the effect of bringing the temperature down from 104 degrees to 101 degrees. Several days after the colostomy was performed, a segment of bowel, situated above the umbilicus, became enormously distended, and could not be emptied by irrigation through the tube, or by siphonage of the stomach, or by rectal enemata. Finally, this local distension became so great, and pressed so seriously upon the lungs and heart, that another opening in the bowel was contemplated. As the mass was so very tympanitic, and was probably the transverse colon, I concluded to pass a small aspirator needle into it. This I did, entering the needle obliquely, and I had the satisfaction of hearing the gas rush out, and in seeing the mass collapse as if a balloon had been punctured.

From this time on the case pursued an uneventful course. The obstruction, which was either a volvulus or fecal impaction at the splenic flexure of the sigmoid, was overcome. The colostomy remains, of course, to be cured by a plastic operation. To my mind, this case represents a life saved by prompt surgical intervention. Not so much by my own limited experience as by the experience of others, I am convinced that we do not value as we should the life-saving possibilities of either an enterostomy or colostomy in desperate cases of ileus. It is a treatment which may tide the patient over an immediate crisis, is easy of execution, and can be done with local or short general anesthesia. It is useful alike in acute obstruction mechanically induced or in that due to septic paresis.

Apart from the relief incident to emptying the distended bowel by irrigating the intestines, we lessen the ptomaine production within the intestines and the systemic infection from this common focus. More than one clinician has impressed the idea that a parietic bowel is no longer a sewer, but is really a reservoir full of infection, and that, in septic peritonitis we have only done a part that is needed when we irrigate and drain the septic peritoneal sac. Complete surgery can only be accomplished by incising and emptying the distended bowel. In the hands of quite a number of practitioners, this practice has been attended with very encouraging results.

Progress in Medical Science.

PEDIATRICS.

REPORTED BY MAUD J. FRYE, M. D.

INGUINAL HERNIA IN CHILDREN.

ECCLES (*British Med. Jour.*, May 13, 1899,) discusses the treatment. Referring to causes he gives as his opinion that cough, constipation, phimosis, and the like, are not the most general and potent factors in producing inguinal hernia, but that improper diet, with the resulting gastro-enteritis, diarrhea, vomiting and over distension of the bowel with gas, is the chief agent in its causation.

In regard to treatment, he considers the radical operation necessary in a small minority of the cases only. It may be advised as follows :

1. Where a child is being properly fed, but in whom a hernia, after a fair trial is not retained by a suitable truss, so that there is little or no chance of a spontaneous cure.
2. Where part of the contents of the sac are irreducible.
3. Where a truss has been worn for at least three years, but with no apparent cure of the protrusion.
4. Where a child has reached the age of at least three years, but has never worn a truss.
5. Where a herniotomy has to be performed for strangulation.

The nonoperative treatment the author believes to be curative in the great majority of cases. He condemns the use of the wool truss, regarding it as inefficient, except in the simplest cases. The spring truss which he advises should be measured for as in the adult, the tape being passed around the pelvis obliquely at the base of the sacrum behind, half way between the crest of the ileum and the top of the great trochanter at the side, and above the symphysis pubis in front. For a single truss the actual number of inches obtained is the correct size; for a double, add one inch more. The adjustment of the truss is of the utmost importance. The whole of the pad of the truss, in order to close the inguinal rings, must lie above the curved line running across the lower abdomen of the child, and known as the fold of Venus. Placed below this it fails to close the canal and pressing the delicate flesh against the pubic bone is liable

to cause excoriation. The truss must be worn by the child continually, day and night; sleeping and waking. When removed for cleanliness, the patient must be recumbent and the hernial aperture protected by the nurse's finger or thumb.

Treatment by truss should be begun at the earliest possible moment. It should not be discarded until the child has reached the age of three years. In addition to the use of the truss, attention should be given to the diet, and the bowels carefully regulated. Phimosis may be operated for, if other adequate reasons exist, but its correction will not alone bring about a cure.

THE ANTITOXIN OF DIPHTHERIA AS AN IMMUNISING AGENT.

ADAMS (*Archives of Pediatrics*, June, 1899,) gives the result of the employment of diphtheria antitoxin in 422 cases. Those receiving the treatment were the children admitted as patients to the Children's Hospital in Washington, and the ailments from which they were suffering included almost every variety of surgical or medical disease. The antitoxin was given on account of the repeated occurrence of diphtheria in the institution. The dose given was 100 units to infants, 250 to those between two and six years of age, and from 300 to 500 above this age. Seventeen or 4.28 per cent. of those immunised contracted diphtheria. The maximum duration of immunity was five months, twenty-four days; the minimum, eleven days.

The urine was carefully examined both before and after the administration of the antitoxin. No effect on the kidneys was observed. Urticaria appeared in two cases.

The author believes the dose given for immunising is too small. He feels warranted in asserting that the larger the dose the longer the duration of the immunity.

GENITO-URINARY AND SYPHILITIC DISEASES.

CONDUCTED BY BYRON H. DAGGETT, M. D., Buffalo, N. Y.

GONORRHEAL INFECTION.

COLOMBINI (*Cent. f. Bakteriologie*, December 30, 1898; *Albany Med. Annals*, April, 1899,) reports an unusual case of gonorrheal infection. The patient, a young man, had an attack of gonorrhea, followed by the formation of an abscess in the groin,

epididymitis and parotid gland. The urine contained albumin, casts and blood. The suppuration gradually ceased and the urine cleared.

The gonococcus, presenting the usual morphological and cultured properties, was found in the discharges from all the suppurating glands, it also reproduced its kind by inoculation into a healthy urethra.

SYPHILIS, INSANITIES AND PSEUDO-INSANITIES: PROGNOSIS AND TREATMENT.

CHAS. K. MILLS, before the New York Academy of Medicine, March 16, 1899. In nervous syphilis there are three classes of diseased processes to be taken into consideration—namely, (1) True syphilitic lesions, due to the continuing action of the specific virus; (2) secondary softenings, indurations and degenerations; (3) Para or metasymphilitic affections, degenerative diseases, remote consequences of the virus.

These parasyphilitic diseases are the issue of syphilis; they are “products of its action, under its influence, and without it in all probability would not be present; but although thus proceeding from syphilis, are not of a syphilitic (specific) nature.”—Mickle.

If there be a clear diagnosis of specific nondegenerative lesions, without marked secondary changes, the prognosis under specific medication is good.

The larger majority of cases present the combination of three specific lesions and secondary degenerations and parasyphilitic disease. The true specific lesions may be controlled or influenced by special medication. The most important forms of syphilitic insanity are as follows: (1) Syphilitic mental disorders due to the presence in the blood of the specific toxin (syphilemia) without the signs of degenerative disease being present; (2) dementia paralytica or general paralysis, uncomplicated by parasyphilitic disease; (3) syphilitic pseudoparesis.

True dementia paralytica is a parasyphilitic, progressive, degenerative disease. The first division includes the syphilitic toxemic insanities, such as syphilitic melancholia, mania and syphilitic acute dementia. Profound syphilitic melancholia may be preceded by neurasthenia, physical and mental exhaustion, most marked in the secondary stage and should not be confounded with disorders of nutrition or psychic disturbances, due to apprehension and remorse.

Syphilitic melancholia is the manifestation of a specific toxemia. Syphilitic melancholia is characterised by depression, depressive hallucinations, by hypochondriacal delusions and delusions of suspicion, persecution and poisoning, often with suicidal tendencies. In syphilitic mania there are often rapidly changing hallucinations and delusions, with incoherence, also associated with mental exaltation, varying from hypomania to delirious mania. In other cases the leucic virus may cause stupor, torpidity and apathy in various degrees. Syphilitic insanity may exist without presenting specific lesions or degeneration of the noble elements of the nervous system. Insanities and pseudo-insanities, due to syphilitic toxemias, without recognisable organic lesions, under early and active treatment, warrant a favorable prognosis.

Incurable dementia and chronic mania will not be the termination of this stage in the hands of a skilful therapist. The mercurial or the mixed treatment is the most applicable. Mercury should be administered for its constitutional effects and the iodides in increasing doses.

Tabes and paralytic dementia are practically the same disease, syphilitic pseudotabes and pseudoparesis are comparable affections. True uncomplicated tabes and general paralysis are parasyphilitic diseases. 80 to 90 per cent. of all general parietic cases are syphilitic. A syphilitic toxin may dwell in the blood for years and years inert and innocuous, or under morbid activity it may set up disease in any of the tissues of the body. Syphilitic pseudoparesis is far more common than true pseudotabes and its lesions are protean and numerous. The prognosis and treatment of syphilis must be based upon a thorough differential diagnosis and the treatment guided by an investigation of its various forms, including the history of the treatment pursued and the idiosyncrasies of the case. For prognosis and treatment there must be a clear distinction made between specific lesions and parasyphilitic or metasyphilitic affections. The curable syphilitic diseases bear recent specific lesions. According to the degree of involvement of the true nerve elements is prognosis unfavorable and treatment unavailing. In no branch of medicine and surgery is accurate and thorough diagnostic study of cases more important than in the treatment of nervous syphilis. The physician should be competent to diagnosticate and treat syphilitic disease without making experimental therapeutic test. The mixed treatment is the most valuable for the chronic forms of nervous syphilis.

THE USE OF THE URINE SEGREGATOR IN THE DIAGNOSIS OF DISEASES
OF THE URINARY TRACT.

DR. HARRIS, of Chicago, before the New York Academy of Medicine (*Journal of Cutaneous and Genito-urinary Diseases*, May, 1899). The purpose of the instrument (Harris segregator) is the separate collection of the urine from each kidney. This instrument, by means of a lever in the rectum or vagina, raises a septum in the bladder. A double catheter, or rather two catheters with Condé beaks are introduced into the bladder through a common shield and the catheters are rotated so that the beaks dip over the septum, one on each side of the bladder. In this way the urine from each ureter is taken up and carried out to separate vials. The technique of the use of the instrument is not difficult and the errors or failures reported are the result of faulty manipulation. The patient should lie flat upon a table with thighs flexed.

The bladder should be irrigated with sterilised water through the segregator. The instrument should be adjusted while the bladder is distended with the sterilised fluid by blocking the return flow. The catheter must be in the median line while the lever is inserted and fixed. The lever should be kept in a horizontal line. The catheters are then rotated to their fullest extent and held by small spiral spring and the large spiral spring is caught into one of the notches of the lever with tension sufficient to produce moderate pressure. The instrument is gently withdrawn until resistance is felt. The fluid is then allowed to escape from the bladder and the vials and hand bulb are attached. The hand bulb should be gently used until the flow of urine is started. The flow is intermittent and regular and comes in drops. If the flow comes from each side we may be certain of the existence of two kidneys. The location of pathological process in the urinary system may be determined by this instrument. The instrument should be left in place for thirty minutes and can be used without anesthetics in the majority of cases.

The contra indications for the use of this instrument are distorted bladders, vesicle calculi and excessively enlarged prostates.

Dr. Sondern said that this instrument was satisfactory in its results in most cases, but it was inferior or less reliable than the methods employed by Casper and Kelly by direct catheterisation of the ureters, but its technique was less difficult. The Harris instrument, like all others, had its limitations.

Dr. Elsberg expressed admiration for this ingenious instrument. The speaker reported various experiments with the use of the Harris

segregator, and said that it could be used by any one, so that examination of the separated urines would become more general and thereby our knowledge of renal disease advanced.

SOME OBSERVATIONS ON THE PROSTATE.

R. H. GREENE and J. W. Blanchard (*Journal of Cutaneous and Genito-urinary Diseases*, January, 1899,) report the results found in the examination of 214 cases of urethritis which presented a discharge from the anterior urethra. The examinations were made to determine the relative frequency of the involvement of the posterior urethra. The prostate was examined in all cases. The prostatic secretion was examined microscopically in twenty-nine cases. The anterior urethra was first washed, the urine was then passed and examined for pus. These cases presented no indications of bladder involvement. The prostate was examined by the finger passed into the rectum. Secretion from the prostate was obtained by digital massage and examined microscopically. In some cases the secretion was extremely scanty, but in a large majority of cases an amount consisting apparently of several drops could be seen in the urine passed. Of 214 cases all gave a history of one or more attacks of gonorrhea, except four. The posterior urethra was found involved in 142 cases—66 per cent.—and the anterior in 72 cases or 34 per cent. The examination of the prostate showed an enlargement to the finger in 102 cases or 47 per cent. of all. The enlargement or swelling was marked in the left lobe of the prostate in 71 per cent. of these cases; and 19 per cent. in the right lobe. General enlargement in 10 per cent. of the cases in which any enlargement was present.

Dr. Blanchard reports examination of twenty cases and the following is an example of his findings

Case 158.—1, pus; 2, leucocytes; 3, few eosinophiles; 4, very many small lymphocytes; 5, very many erythrocytes; 6, large and small spheroidal epithelium, with eccentric nucleus, few with central nucleus; 7, few bodies without granules, few bacteria.

Out of twenty specimens there were pus in sixteen and diplococci in three. The most ordinary microscopic presentations were pus, mucus, and corpora amylacea, indicating infiltration into the prostatic follicles. The presence of lymphocytes would probably indicate infiltration or some change in the interstitial tissue. There are two forms of posterior urethritis. One apparently confined to the surface

the other dipping down into the prostate. Congestive inflammation of the prostate frequently accompanies urethritis, which does not cause abscess formation. Whether the prostate is fully restored to its normal condition is unknown. We also find enlargements not due to urethritis. There are many mysteries connected with this organ. The evidence of those who have studied urethritis in the male, with the exception of the reports of a few gentlemen, who allege that it is an ephemeral disease, which can be cured by a few irrigations, tend to show that as in the female it is a serious affection and that it often involves structures remote from its infecting nidus, and this may occur at any time during the existence of the disease.

LEGAL AND STATE MEDICINE.

CONDUCTED BY WILLIAM HOBSON HEATH, M. D., Buffalo, N. Y.

IN NO branch of the science of medicine are medical men so deficient, in none so poorly trained, as in medical jurisprudence, particularly in this country. The amount of knowledge which concerns the legal and medical professions in common, has never been so extensive or important, nor the necessity for the application of medical knowledge to elucidate legal questions, or determine justice, become so frequent and necessary.

The possibilities, in view of these facts, the present state of medical science, the physician himself, in relation to legal affairs, justifies the JOURNAL devoting a part of its energy in this field.

Matter presented to the busy practitioner will be practical, concise and absolutely up-to-date. The relationship of medico-legal, and state interests will also permit the presentation of matter and ideas upon this subject which will be made interesting as they are valuable.

HOSPITAL LIABILITY.

The question of hospital liability to patients in event of certain conditions arising, is one of the utmost importance, and while the subject is yet in a transitional state one phase of it has arisen and been passed upon by no less authority than the Appellate Division of the Supreme Court, State of New York, viz.: Ward vs. St. Vincent's Hospital. The case in question concerns the hospital's liability for negligence on the part of its servants. Briefly, Miss Ward, about to be operated upon by her private surgeon (one of the visiting surgeons on the staff), engaged a private \$25.00 per week room at the

hospital, with the usual services and advantages that are incident to or are given private room pay-patients, and additionally in view of her peculiar dread of anesthetics, contracted with the hospital for an extra special, skilled, trained nurse, at the rate of \$3.00 per day; total expense, \$46.00. While *unconscious* she was carried from the operating to her own room, and put into a bed, from which the nurse had neglected to remove an unprotected rubber hot-water bag. As a result of laying upon this bag, her leg was burned, so seriously as to prolong her recovery, increase her suffering and leave her permanently injured—making a great change in her manner of life, which was formerly one of great physical activity—riding, golf, outdoor, etc.

Suit was brought and went against her in the Supreme Court, Judge Cohen dismissing the case on the following grounds: (1) That it was one of "tort" not contract; (2) that the hospital was liable only for the original selection of its servants—unless unfitness was shown since; (3) that it was a charitable institution, not run to make money, declare dividends, etc., the profits from pay-patients going to support the charity ones; (4) that placing the liability upon them as such it would restrict their efforts to suffering humanity, liability acting as a deterring effect; (5) that it is necessary occasionally for the one to suffer for the many.

On being carried to the Appellate Division, all the justices concurred in granting a new trial. Its decision drew a distinction between the public ward and private room departments. The latter, in this case, entered into a distinct agreement and contract to do certain things which they did not do in full, as it appeared that instead of supplying skilled, fully trained nurse, they substituted a person who had only had nine months out of the two years' training course; that had a distinct *trained*, not *training* nurse, been placed on duty, as called for in the contract, the accident most likely would not have occurred.

The decision completely ignores the lower court's view of the matter and is most interesting, establishing, as it does, a precedent for some time to come.

The question of the hospital's liability in cases of, or cases of alleged malpractice to this extent being now established and a precedent made, it naturally suggests the question of liability in the case of the attending surgeons or the attending staff. The relationship of these two bodies are peculiar and their mutual interdependence and benefit arising to each is often incidentally lost sight of.

The hospital holds the confidence and patronage of the public largely from the skill, ability and reputation of its attending unpaid officers, and is the sole recipient of pecuniary advantages. The services of the attending staff are frequently so great that it is a matter of surprise to many that it receives no compensation therefor; that the only unpaid for service is the most important and vital. The staff, on the other hand, though receiving no money return, is undoubtedly rewarded by the reputation the holding of such position gives, the public presupposing high ability, by the opportunity it affords for observation, study, and the rapid acquirement of skill and experience, as an indirect result, and practice and emolument.

From analogy on the Ward case, it would appear that a distinction is to be drawn in the two departments of a hospital when they exist (in private room practice the liability is much simplified by the fact that the patient generally arranges with the surgeon direct and thus relieves the institution). In ward practice, however, the conditions are different, as is well known. Here the hospital could be held on the ground of principal and agent, lack of money consideration being no evasion, nor the advantage of experience, etc., which are benefits merely incident to the duty voluntarily assumed. On the other hand, action against the surgeon alone is warranted on the ground that he alone is in control of and has direct and immediate control of his action. Joint action against the hospital and the surgeon is justified on the ground of "joint tort feorsors." The distinct settlement of this question will not be without gain to all concerned, particularly the public, inasmuch as it will determine great care in the selection of the attending staff, giving good grounds for the elimination of religious, political, or other influence in the appointing, and making the surgeon more careful if possible, deterring unjustifiable operations and other practises open to criticism.

Features of interest brought out in this case is the differentiation of the liability or degree of liability in the private room pay department of charitable institutions. In it the liability of the hospital is established, whereas in the charitable side it would be governed by a different construction, viz. : that where a corporation is conducting a charity with funds intended for that purpose it is not liable for the "torts" of its agents or servants, as it would be against all law and equity to take funds contributed for charitable purposes to compensate for injuries inflicted or occasioned by neglect. This limitation of liability is further justified that successful financial management is applied for the benefit of suffering humanity and not to profit-bearing.

A number of points bearing upon this question will be taken up in the near future to the extent of presenting the case and status by existing decisions, not at this writing obtainable.

PREVENTION OF CHOLERA INFANTUM.

HORATIO C. WOOD affirms (*International Clinics*) that this disease is often nothing more than heat exhaustion with vasomotor paralysis and a leakage of serum from the bloodvessels into the intestines. The prompt reduction of high temperature is indicated if the case is seen early before collapse, but when this has taken place the application of heat and the internal use of stimulants must be resorted to. Prophylaxis, says the writer, is as easy as for ordinary sunstroke. "Keep the child in a cool, shaded place, with plenty of air and as little clothing as possible." If the weather is very warm, bathing the child twice a day in front of an open window will help to keep the temperature normal. In young infants who appeared perfectly well, he has frequently found a temperature of 102° or 103° after several successive days of hot weather.—*Denver Med. Times*.

DR. WALTER B. DORSETT, professor of obstetrics in Beaumont Hospital College says: "Although I once was enthused with the belief that it was a feasible undertaking to treat successfully uterine fibroids by the ligation of the uterine arteries per vaginam, I now know in the light of subsequent experience, it is not worth the trial, and I consider the ligation of the broad ligament, en masse, which means a thorough obliteration of arteries, veins, nerves and the like, contained in the broad ligament, as practised by Martin, as unworthy of a place in medical literature."—*Amer. Jour. Surg. and Gynec.*, August, 1899.

ACCORDING to the *Medical Record*, under the Spanish rule, in order to practice legally in Cuba, it was necessary to hold a diploma of the University of Havana or of some University in Spain, viséd by the proper authority of the district. Those holding foreign diplomas were obliged to pass an examination or to obtain a temporary license. Since the expulsion of the Spaniards, the *Archives de la Policlinica* complains, many foreigners have come to the island and begun practice without let or hindrance. Our contemporary naturally holds that such an abuse should be stopped by the authorities now governing the country.—*Medical Age*.

New Instrument.

A NEW SHUT-OFF.¹

By J. HENRY DOWD, M. D., Buffalo, N. Y.,

Genito-urinary surgeon, Buffalo Hospital Sisters of Charity.

THE contrivance I exhibit you is a simple affair, but one I trust will fill a much felt want. Its simplicity of handling must appeal to all, for with one hand and slight pressure of the thumb a stream of water can be directed moderately or with force on any wound or operating field. Furthermore, by simply releasing the thumb complete closure takes place. Its advantages as compared with others of this sort may be summed up as follows: No fear of rust or corrosion from fluids, as with Esmarch's, where leakage cannot but occur

We have diligently though unsuccessfully tried to obtain this cut from the Jeffrey-Fell Company, Ellicott Square, Buffalo, N. Y.—EDITOR.

around the metal fittings, thus in a short time causing them to corrode and break.

The operator or his assistant, with either hand, has complete control, only having to drop or release his thumb to stop the flow. This one point should appeal to all surgeons who daily see the nozzle

1. Read at the Surgical Section, Buffalo Academy of Medicine, May, 1899.

of a douche-bag put into the mouth of the latter when they want irrigation stopped. The cheapness is an important factor, the makers being able to furnish them at about half the price of similar shut-offs. Although I have had one of these in use for six months or more, with constant pressure on the rubber tubing, there is not the least sign of cutting of the latter at site of contact. For those who do not use an irrigator daily and do not want the tubing compressed continuously I have affixed a small catch which can be used to relieve pressure when the douche is not in use.

288 FRANKLIN STREET.

Abstract.

ACUTE DYSENTERY.

DR. ST. J. V. GRAHAM (*Georgia Journal of Medicine and Surgery*, July, 1899,) states that the drug treatment of acute dysentery resolves itself into five or six drugs—calomel, opium, ipecac, tannopin, salines and quinine. If the case is seen early when diarrhea is present, with a lead-colored or brown tongue, much benefit may be derived from giving calomel, a quarter-grain every fifteen minutes, until six, eight or ten doses are taken. An acid saline is then administered, after which bile usually begins to flow. This is nature's antiseptic, and no chemical compound or so-called intestinal antiseptic can be compared with it. After this has been kept up for a sufficient time for the exigencies of the case, tannopin should be administered, combined with ipecac and opium, in the form of Dover's powder, or of each drug in simple powder combination. Tannopin should be given in ten or fifteen grain doses every two and one-half or three hours. An ice bag over the belly is preferred by the writer to any form of poultice. If necessary the bowels are irrigated with a bisulphate of quinine solution—one teaspoonful to a quart of cold water. Very little quinine will be absorbed, for it will not stay in long enough. The diet should be carefully adjusted to suit individual peculiarities and the stomach digestion. Stimulants should be used as indicated. The above treatment, which is indicated in acute cases, has proved very successful. In chronic cases, however, an essentially different drug treatment should be resorted to.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges should be addressed to the editor: 284 FRANKLIN STREET, BUFFALO, N. Y.

VOL. XXXIX.—LV. SEPTEMBER, 1899.

No. 2.

THE HYDROPHOBIA "EPIDEMIC."

FOR the past month the health department has had its hands full of what has been termed an "epidemic of hydrophobia." The events of the past thirty days giving rise to this condition may be summarised in a few words. In the latter part of July there was brought to the attention of the health commissioner, Dr. Wende, the case of a man who had been badly bitten by a dog which had run amuck through the district contiguous to Alden, in this county. That this dog was suffering with rabies when he attacked and bit the man there is no doubt. Its movements were closely followed from the time it left its owner's premises until it was killed in a nearby village, and it developed that it had bitten a large number of dogs, several other animals, and a number of human beings.

The very careful and painstaking investigation of this case brought to light many other cases wherein animals suspected of rabies had been killed. For a few days the matter rested and then cases of suspicious aspect came to light within the city limits. The health department took prompt action. To Dr. W. H. Heath, who by reason of experience was best qualified to report, was assigned the difficult task of investigation and diagnosis of cases within the city limits.

Dr. Wende issued a proclamation reciting the facts, and warning the public to keep dogs in off the streets. Complaints regarding sick dogs poured into the health department, and the many persons bitten by dogs during the month asked for investigation and opinion as to the conditions presented. Many undoubted

cases of rabies in dogs were discovered. Where they had not done any damage they were taken to the pound and killed. Where animals under suspicion had bitten a human being, they were confined and kept under observation. In several cases undoubted rabies developed.

Up to the time of this writing there has been one death, that of a child at Sloan, just outside the city limits. This case was seen by Dr. Wende and Dr. Heath and was watched and closely studied for sometime before death.

The health department took hold of the matter promptly and acted decisively. The proclamation issued was clear cut and to the point, and the investigating has been thorough and searching.

It is problematical as yet what the outcome of all the dog bites reported will be in view of the uncertainty regarding the period of incubation. In the case of the child at Sloan between eighty and ninety days elapsed from the time the child was bitten to the appearance of the paroxysms.

Four patients were sent to the Pasteur Institute in New York City, at the expense of the county, and were returned home after treatment with assurances that they were practically safe from rabies.

One of the cases so treated was that of a man who was bitten by the same dog whose bite caused the death of the child at Sloan. His will be an interesting case to watch, since it is perfectly comparative. The dog was unquestionably mad. The child untreated by the Pasteur method died. The man treated lives. While there is no question regarding the efficacy of the treatment and the immense amount of good it has done, yet one cannot, from purely a scientific viewpoint, refrain from watching with an unusual degree of interest the outcome in this particular instance.

OVERCROWDING IN THE NURSING PROFESSION— A REMEDY.

THE profession of trained nursing is scarcely out of its teens and yet one already hears the cry that the field is overcrowded, a cry which the city physician, besieged by nurses in search of work, knows is only too true. Various remedies are proposed to relieve the condition for which the rapid increase in the number of hospitals is

responsible, an increase which has worked ill to the physician as well as to the nurse.

A reduction in the number of training schools by the union of those connected with small hospitals will be a wise change, both because it will lessen the supply of nurses and because it will afford better instruction to those who now graduate from special hospitals with but inadequate training. The lengthening of the course of training to three instead of two years is also desirable. So, too, would be the change from a school in which the pupil nurse is paid for her work to one in which she pays for her tuition.

Yet, with all these checks to lessen the number of trained nurses, the profession will remain overcrowded so long as graduate nurses remain in the city and demand \$20.00 a week for their services. There is, however, an almost limitless field for those women willing to go into the country and take for their services what their patients can afford to pay. To the woman who in addition to earning her living would like to feel that she is doing some good in the world the country town ought especially to appeal. The need for trained nursing there is great and the demand for the work will grow as its worth becomes known.

A physician in a village of 1,000 inhabitants gets from one-third to one half the fee for a given service which the city physician, practising among the well-to-do, receives. The nurse in a country town of this size could command from \$7.00 to \$10 a week. Living expenses will be much lower than in the city, and the diminished income will be more than offset by the lessened outgo. The social position of a nurse in a small town may, and usually will, be superior to that which she holds in the city where nurses live almost as a class apart.

It was the fortune of the writer not long ago to be called to the sick bed of a friend in a country town remote from the city. The attempt was made to find a nurse to relieve the tired-out sister who had acted as such. The only women in the village who did nursing, neither of whom could be had, were two, who during the lulls in business did washing and scrubbing. As nurses they received \$1 a day. To those who are accustomed to the tender ministrations of the trained nurse, a sponge bath given by their laundress would at least seem rather unseemly. This town supported four physicians and the one in charge of the case said that he alone could much of the time keep one nurse employed

The woman to succeed in the country, and success surely awaits the right woman, must be one possessed of great adaptability, of good judgment, able to hold her tongue, willing sometimes to do work outside the usual line, and above all a woman of common sense. The country doctor will welcome her coming, for he will recognise in her an ally, for want of whom he has fought many a losing battle.

THE christian science question which was before the aldermen when the last issue of the JOURNAL went to press is still before the board, having at the last meeting before the August vacation been laid over until the first meeting in September by resolution introduced by the joker of the board of aldermen, John P. Sullivan. This may have been one of Alderman Sullivan's jokes. Maybe, too, it was the result of political friendship on the part of the alderman for the able counsel of the christian scientists, Mr. John Cuneen, who, though he is fighting under the green flag of fanaticism, is nevertheless fighting as he always fights, stubbornly and to the finish. The mere laying over of the proposed ordinance for thirty days will not affect the ultimate result one iota. It merely serves to give the scientists thirty days more in which to spread disease and violate the law. They do both with equal disregard for the discipline of civilisation.

It will be interesting now to watch the next meeting of the board of aldermen for two reasons: First, because vital public interests are at stake; secondly, because there is a growing suspicion that the game of politics is entering into the question. The city will elect aldermen this Fall.

THE "scientists" had a sort of a celebration in Jersey City a few days ago, and wound up with an experience meeting which must have been, in its entirety, one of the most remarkable affairs on record. Biblical miracles were discounted and thrown utterly in the shade. Besides the wonders performed by these latter-day saints the miracles, as reported in the Bible, were merely experiments and rather crude efforts at that.

According to the experience of those who had been saved all degrees of suffering and cured of all sorts of terrible maladies, the pastor of the church—the chief miracle-worker—had only to raise his hands above his head, and, lo! cancers shrivelled up and disappeared, epilepsy ceased from troubling, and the choreaics were at rest.

Maybe it would be more satisfactory to JOURNAL readers to have presented in narrative form a few of the "most glorious victories over matter." One woman rehearsed the old familiar tale of cancer cure; another believer had had rheumatism banished by a single prayer; another woman said her daughter had suffered with epilepsy for four years, and had "been made worse by doctors." "Four weeks ago," she continued, the pastor has prayed over the child, "and she has not had so many attacks since."

The sensation of the meeting came at the end of the experiences, as a sort of an hair-raiser for the wavering ones. An old woman, prefacing her remarks with a statement of her undying belief and faith in the efficacy of prayer, said she knew a man in Texas who had spilled acid in his eyes. The eye-balls were so badly injured that both were removed by surgeons. He became a believer and by the means of prayer, new eyeballs grew into the empty sockets, and now the man can see as well as anyone.

And these are the people who do not believe in disease! Is it any wonder they fight for delay in any movement which will bring them within reach of the law?

The New York Medical Journal has recently called attention to a very careless habit of a large number of medical editors in failing to give credit for items of news and other paragraphs quoted from exchanges. We, ourselves, are often thus victimised but had concluded it was one of those conditions to be endured. It is possible, however, that it may not be amiss to invite attention to the subject and it cannot be done in any more effectual manner than to print what our distinguished contemporary says :

THE UNACKNOWLEDGED CLIPPING HABIT.

We must again call attention to the fact that we are dropping from our exchange list journals which we detect in wholesale clipping, without acknowledgment, from our columns. Accidents, of course, will occasionally occur, but instances are often so flagrant, as in the case of one journal which we have dropped this month for five such offenses in one number, that they can only be intentional. We are interested in the maintenance of that system of journalistic courtesy which is willing to place the free use of its material for the public good in the hands of editorial confrères. But that courtesy, like all others, deserves the acknowledgment which we ourselves consistently endeavor to give, and which we certainly expect.

THE word celiotomy which is gradually creeping into journalistic literature, is such a mongrel in derivation and meaning that we are surprised at its considerable use among lettered men. We have intended for some time past to invite attention to the undesirability of the word. The *New York Medical Journal*, however, whose editor is one of the most distinguished medical philologists, has taken up the question in a recent issue from which we quote :

“ ABDOMINAL CELIOTOMY.”

A few years ago the word celiotomy, to denote abdominal section, was brought forward with great insistence on the part of its advocates that it was a better word for the purpose than laparotomy. We have never thought so, and the word does not seem to be universally recognised as fully signifying abdominal section, for it is getting to be more and more common to see the expression “abdominal celiotomy” in print.

The word celiotomy, itself, is bad enough, but the terms “abdominal celiotomy” and “vaginal celiotomy” are an abomination. We print them when authors write them in original communications, for then there is no time to enter into an argument over the matter, but in the editorial pages of this journal they have always been excluded and they always will be.

THE State Board of Health of Kentucky has given notice that it will hereafter refuse to recognise as a basis for certificates to practise medicine diplomas from any medical college which does not in good faith comply with the requirements of the American Medical College Association, the American Institute of Homeopathy, and the American Eclectic Medical College Association, respectively, both as to preliminary education and four years' course of study. This means that no school that graduates three-year students will be recognised in Kentucky hereafter. The Board provided an examination for three-year graduates of the present year, as many of the students had attended such schools in ignorance of its advanced requirements, but found this course unsatisfactory, a large percentage of the examinations indicating incomplete preliminary education as well as imperfect medical training. This standard for the State of Kentucky was made and promulgated in 1891, to take effect the present year, but is again published that schools patronised by Kentucky students and future graduates expecting to practise in the State may fully understand the requirements of the board.—*Medical News*.

DURING the hearing before the board of aldermen on Tuesday, August 1, 1899, relating to the application of the health commissioner, Dr. Wende, for an amendment to the ordinances to compel christian scientists to report contagious diseases, the Hon. Tracy C. Becker, attorney for the Medical Society of the County of Erie, spoke in part as follows :

There are some very great misunderstandings in the minds of the public and of the opponents of this ordinance as to its object and as to the attitude of the physicians of the county toward it. There is an ordinance which provides that physicians shall report to the health department diseases which are contagious or infectious. There is a boundary surrounding the occult and mysterious which is not to be passed by any finite beings, and it may be that these people may be able to exercise powers that produce great results. The physicians of the Erie County Medical Society do not deny or affirm the efficiency of christian science, but they do say that if they are required to report cases of contagious disease, others shall do the same.

This is a succinct and able statement of the case from a medical viewpoint, and could cause no offense to any right-minded citizen.

PERSONAL.

DR. L. S. MCMURTRY, of Louisville, president of the faculty of the Hospital College of Medicine, medical department of Central University of Kentucky, will deliver the address upon surgery at the meeting of the Mississippi Valley Medical Association, to be held at Chicago, October 3-6, 1899. Dr. H. H. Mudd, of St. Louis, was elected to this office, but owing to his absence in Europe, will be unable to perform the duty. Therefore the president, Dr. Duncan Eve, of Nashville, has appointed Dr. McMurtry in his stead. It is needless to add that an interesting and instructive address from Dr. McMurtry may be expected.

DR. C. G. STIVERS, formerly of Niagara Falls, now of Los Angeles, Cal., has become assistant editor and business manager of the Southern California *Practitioner* and will have a general oversight, both editorially and financially. The *Practitioner* in its issue for July says : "Dr. Stivers is a graduate of the University of Pennsylvania, after which he spent eighteen months as an interne in the well-known Blockley Hospital, Philadelphia. Since his leaving the hospital he has practised medicine in Niagara Falls until about a

year ago, when he located in Los Angeles. Since coming to this city he has gained the esteem of the physicians of Los Angeles, and his association with the *Practitioner* is a matter of congratulation for the profession of Southern California."

DR. HERMAN MYNTER, of Buffalo, sailed on the *Friederich der Grosse*, August 10, 1899, for a visit to Denmark and Norway. At Copenhagen he will read a paper before the Royal Medical Society on the Etiology and pathology of appendicitis and their bearing upon its treatment. Denmark, it is well known, still maintains that appendicitis is a medical disease and that the strict opium treatment is the correct one and Dr. Mynter has been challenged to prove the opposite. We have little doubt but that he will be able to convince his Denmark confrères of their error. He will return during the first week of October to resume his professional work.

DR. A. MARTIN, the well-known gynecologist of Berlin, and whose fame in that department of medicine is world-wide, has been appointed ordinary professor of gynecology in the University of Greifswald. This is in accordance with the established German method of advancing subordinate teachers to first place as vacancies occur.

DR. HENRY JONES MULFORD, of Buffalo, announces the removal of his office to "The Colonial," 401 Delaware avenue. Hours: 10 a. m. to 12 m., 2 to 4 p. m.; Sunday, 12 m. to 1 p. m. Residence, The "Elmwood Heights," 597 Elmwood Avenue. Practice limited to diseases of nose, throat and ear.

DR. AND MRS. WILLIAM G. KRAUSS, who have been summering in Europe, have returned to Buffalo after a most delightful tour. Dr. Krauss barely reached Buffalo in time to hasten to Columbus to preside at the meeting of the American Microscopical Society.

DR. FLOYD S. CREGO, of Buffalo, who has been spending some months in the clinics of Europe, has returned and taken temporary quarters at the Trubee, 414 Delaware avenue. Early in September he will reoccupy his residence, 469 Delaware avenue, corner of Virginia street.

DR. F. D. THOMPSON, of Forth Worth, Texas, recently paid a short visit to Buffalo en route to the coast of Maine to visit his son who is

at school in that state. Dr. Thompson, who is one of the most prominent physicians in Texas, pays frequent visits to the North, this being the second one since January 1, 1899.

DR. MAX BREUER, of Buffalo, a former surgeon in the Imperial Army of Germany, has just been decorated with the Cross of the Legion of Honor for saving the life of a French seaman. He was on board a German vessel, and hearing that a French seaman was on board a British ship suffering from a wound in the arm, he at once went to the man's assistance. He amputated the arm, and so saved the sailor's life. This prompt action came to the notice of the French Minister for Foreign Affairs, with the result that the German doctor has been decorated. Dr. Breuer is now on a visit to his native country, but will return and resume his practice early in the autumn.

DR. MAX SANGER, the well-known gynecologist of Leipzig, has accepted the chair of obstetrics and gynecology at the German university of Prague in succession to Professor Rosthorn, who was recently transferred to Innsbrück. —*Med. Bulletin.*

DR. CHARLES A. WALL, of Buffalo, who has been touring with his family in Europe the past summer, has returned and resumed his practice.

OBITUARY.

DR. H. G. P. SPENCER, of Watertown, who for more than half a century had been in the successful practice of medicine in that city, died June 27, 1899, at Minneapolis, Minn., where he had been spending sometime in an attempt to recuperate his health.

Dr. Spencer was one of the principal founders of the reorganised Jefferson County Medical Society in 1868. He was the first president of the society, and was its delegate to the state medical society and censor in 1872, 1873 and 1883. In 1883 he was vice-president of the Medical Society of the State of New York. Dr. Spencer has enjoyed a large and lucrative private and consultation practice, and was a bold and successful surgeon until advancing years and failing sight compelled him to relinquish this branch of his profession.

He was the president of the City Medical Society at the time of his

death, having been unanimously elected to that office at the last annual meeting in January.

Besides his wife, Dr. Spencer is survived by two sons, Dr. James D. Spencer and Dr. Gordon P. Spencer, of Watertown; two daughters, Mrs. Ella Martyn, of New York, and Mrs. E. H. Myers, of Carthage, and one brother, Dr. Gustavus N. Spencer, of Philadelphia.

At a special meeting of the Jefferson County Medical Society, at the office of Dr. J. M. Crowe, Jr., for the purpose of attending the funeral of Dr. Spencer, the following members were present: President, Dr. J. M. Crowe; vice-president, G. N. Cannon; secretary, C. M. Bibbins; Drs. Charles Kimball, Hoyt, Ives, George Foote, of Dexter; H. H. Wood, Calkins, J. M. Crowe, Sr., Rodenhurst, Philadelphia; O. C. Eastman, Willard, Gregor, Mason, Cape Vincent; A. B. Stevens, Goodale, Deane, Rexford, Kellow, Brown, Frank Massy, Brownville; Dick, McCaw, Geo. Sylvester, Black River; Joslin, M. L. Smith, Monroe Smith and John Jones, Evans Mills.

Dr. J. M. Crowe, Sr., chairman of committee, read the following resolutions, which on motion were adopted:

WHEREAS, Death has removed from amongst us one of our oldest and most widely known members and the first president of this society at its reorganisation in 1868; therefore, be it

Resolved, That, while yielding to the inevitable, we individually and collectively and as a society, recognise that in the death of Dr. H. G. P. Spencer we have lost a friend and the community at large an honored citizen.

Resolved, That as physicians, we knew him as one to whom we could turn in time of need for counsel and advice. He never failed to respond, drawing from his store of knowledge, gained by years of study and experience in the sick room, by the bedside of the sick and the suffering, be they rich or poor.

Resolved, That, deeply sensible of our loss, we wish to express our heartfelt sorrow and regret at his sudden passing from amongst us.

Resolved, That to his family, and especially to his wife, we desire to extend our deepest sympathy in this, their irreparable loss, praying the Father above may in His good time bind up their wounds.

Resolved, That these resolutions be published in all the city papers; that an engrossed copy, bearing the seal of the society, be presented to the bereaved family, and a copy placed on the files of the society.

J. MORTIMER CRAWE, M. D.

A. W. GOODALE, M. D.

GILBERT CANNON, M. D.

DR. JAMES ELLIOTT GRAHAM, M. D., M. R. C. P. Lond., of Toronto, died in that city July 7, 1899, aged 52 years. He was

one of the most respected medical practitioners in Canada. He held many positions of professional importance, among which was that of professor of medicine and clinical medicine at the University of Toronto, which he filled at the time of his death. The *Canadian Practitioner* for August, 1899, publishes a well written memorial accompanied by an excellent portrait of this distinguished physician.

M. ARTHUR LOUIS ALPHONSE CHARPENTIER, died at Paris, May 29, 1899. He was a Fellow of the Faculty of Medicine of Paris; member of the Academy of Medicine; chevalier of the Legion of Honor, and an Honorary Fellow of the American Association of Obstetricians and Gynecologists.

SOCIETY MEETINGS.

THE American Electro-therapeutic Association will hold its next annual meeting September 19, 20 and 21, 1899, at Washington, D. C., under the presidency of Dr. F. B. Bishop. Many electrical manufacturers will be represented in the Exhibit Hall, and information will be freely given. Papers have thus far been promised from Drs. R. G. Nunn, A. D. Rockwell, Margaret A. Cleaves, F. J. Levisseur, Walter White, Robert Reyburn, G. A. Corson, C. O. Files, J. H. Kellogg, John A. Licthy, W. W. Scheppeegrell, L. Howe, E. Wende, F. B. Bishop, Robert Newman, W. J. Herdman, G. B. Massey and Professors Bergonie, of Bordeaux; Apostoli and Dolbear, of Paris. The chairman of the press committee is Dr. Llewellyn Eliot.

THE annual meeting of the Lehigh Valley Railroad Surgeons was held at the International Hotel, at Niagara Falls, July 21, 1899. The following papers were read and discussed: President's address, Consideration of railroad injuries, with special reference to suits for damages based on so-called railroad spine, Dr. W. G. Weaver, Wilkes-Barre, Pa.; Some practical points in the management of injuries at the elbow joint, Dr. H. T. Dana, Cortland, N. Y.; Treatment of burns, Dr. G. W. Farquhar, Pottsville, Pa.

The following officers were elected for the ensuing year: President, C. H. Ott, Sayre, Pa.; first vice-president, L. E. Hollister, Jersey City; second vice-president, O. E. McCarty, Niagara Falls;

third vice-president, P. Hermany, Mahanoy City, Pa.; secretary and treasurer, J. G. Zem, Lehigh, Pa.; executive committee, W. L. Estes, surgeon-in-chief, South Bethlehem, Pa., ex-officio; R. H. Wilbur, general superintendent, South Bethlehem, Pa., ex-officio; J. G. Zem, secretary and treasurer, Lehigh, Pa., ex-officio; E. B. Dana, Metuchen, N. J.; W. T. Williams, Mount Carmel Pa.; W. R. Longshore, Hazleton, Pa.; A. Stout, Bethlehem, Pa. Delegates to International Association, W. G. Weaver, Wilkes-Barre, Pa.; O. E. McCarty, Niagara Falls.

After the meeting the members with their wives and families visited points of interest about the Falls, after which a ride on the trolley down the Canadian side and the return through the Gorge was taken. Thirty-one members were present and the meeting proved one of the most successful ever held by the association. Dr. G. R. Trowbridge, of Buffalo, and Dr. O. E. McCarty, of Niagara Falls, were the committee of arrangements. The meeting next year will be held in New York City.

OFFICERS of the Buffalo Academy of Medicine—Session 1899-1900: President, Matthew D. Mann; secretary, Thomas F. Dwyer; treasurer, Eugene A. Smith; trustees, Stephen Y. Howell, three years; Benjamin G. Long, two years; Marcel Hartwig, one year. The vice-presidents by virtue of being chairmen of the various sections are: Eli H. Long, chairman section on medicine; J. Henry Dowd, chairman section on surgery; Henry D. Ingraham, chairman section on obstetrics and gynecology; Arthur G. Bennett, chairman section on pathology. The council is, therefore, composed of the aforementioned officers, the president of the Academy of the previous year, Roswell Park, and the secretaries of the sections, who are: J. C. Clemesha, secretary section on medicine; Marshall Clinton, secretary section on surgery; Albert J. Colton, secretary section on obstetrics and gynecology; Frederick H. Millener, secretary section on pathology.

PROGRAM, 1899-1900.

September 5th, Surgery—American aborigines, from a medical and surgical standpoint, A. L. Benedict.

September 12th, Medicine—Quarterly meeting of the Academy—The medical aspect of crime, Daniel R. Brower, professor of mental disease and therapeutics, Rush Medical College, Chicago.

September 19th, Pathology—subject to be announced, George M. Gould, Philadelphia, Pa. Exhibition of microscopic slides illustrating glaucoma, R. H. Satterlee. Subject to be announced, Edmund E. Blaauw.

September 26th, Obstetrics—The relation of gastric disturbances to gynecologic diseases, A. L. Benedict. Anesthesia, Francis W. McGuire. Ectopic pregnancy, L. E. McC. Pomeroy.

October 3d, Surgery—Subphrenic abscess, Prescott LeBreton. Early diagnosis and treatment of tumors of the breast, L. E. McC. Pomeroy.

October 10th, Medicine—Malaria, Irving P. Lyon; discussion by Charles G. Stockton, Marshall Clinton and John D. Howland.

October 17th, Pathology—Landry's paralysis, Dewitt H. Sherman.

October 24th, Obstetrics—Subject to be announced, R. L. Banta. Pus in the pelvic cavity, Herman E. Hayd.

November 7th, Surgery—Subject and essayist to be announced. Subject to be announced, Herman Mynter.

November 14th, Medicine—Protracted pneumonia and slow resolution, John H. Pryor. Hygiene of the asthmatic, George N. Jack, Depew, N. Y.

November 21st, Pathology—The relation of dentition to disease, C. S. Butler, D. D. S.

November 28th, Obstetrics—Subjects to be announced, P. W. VanPeyma; Earl P. Lothrop.

December 5th, Surgery—Quarterly meeting of the Academy—Subject and essayist to be announced. Vesicated suprarenal capsule in acute coryza, Frederick H. Millener.

December 12th, Medicine—The relation of indicanuria to secretion of hydrochloric acid, Allen A. Jones. Addison's disease, with a report of a case, Helene Kuhlmann.

December 19th, Pathology—The ear, George F. Cott. Subject to be announced, Max Keiser.

December 26th, Obstetrics—Subject to be announced, Charles E. Congdon. The difficulties a young doctor encounters in obstetric practice, Nelson W. Wilson.

January 2d, Surgery—Subject to be announced, Chauncey P. Smith. Hypertrophy of the prostate, Charles F. Durand.

January 9th, Medicine—Typhlitis and scolecitis, A. L. Benedict. The treatment of acute appendicitis, DeLancey Rochester.

January 16th, Pathology—Lawson Tait, Stephen Y. Howell. Subject to be announced, Herman E. Hayd.

January 23d, Obstetrics—Differential diagnosis of disease of the appendix and Fallopian tubes, C. C. Frederick. Subject to be announced, Walter D. Green. Eruptive diseases of the female genitals, J. Henry Dowd.

February 6th, Surgery—Subject and essayist to be announced.

February 13th, Medicine—Dress reform, Matthew D. Mann and Mrs. Mankell.

February 20th, Pathology—Extra genital syphilis, Grover W. Wende. New method of analysis of stomach contents, A. L. Benedict.

February 27th, Obstetrics—Title to be announced, Edward J. Ill, Newark, N. J.

March 6th, Surgery—Subject to be announced, Roswell Park. Goitre, Edward J. Meyer.

March 13th, Medicine—Senile bronchitis, Reynold W. Wilcox, professor of medicine and therapeutics. New York Post-graduate Medical School.

March 20th, Pathology—Quarterly meeting of the Academy—Subject to be announced, Frederick Peterson, New York. Subject to be announced, Thomas B. Carpenter.

March 27th, Obstetrics—The early days of ovariectomy; reminiscences of McDowell, Peasley, etc., Matthew D. Mann. Subject to be announced, Helene Kuhlmann.

April 3d, Surgery—Subject and essayist to be announced.

April 10th, Medicine—The treatment of scarlet fever, Henry R. Hopkins. Normal saline solution in gastro-enteric diseases of children, Irving M. Snow.

April 17th, Pathology—Our present knowledge of the inflammatory process, H. R. Gaylord. Subject to be announced, Charles S. Jewett.

April 24th, Obstetrics—Asepsis and antisepsis in obstetric practice, William Warren Potter. Subject to be announced, L. Bradley Dorr. An unusual case of asphyxia, Thomas F. Dwyer.

May 1st, Surgery—Subject to be announced, Edward M. Dooley. Adjustment of glasses for young children, Arthur G. Bennett.

May 8th, Medicine—Gonorrheal arthritis, J. Henry Dowd.

May 15th, Pathology—Subjects to be announced, Herbert D. Pease, State Pathological Laboratory; Charles E. Congdon.

May 22d, Obstetrics—Asepsis and anti-asepsis in obstetrics, Devillo W. Harrington. Obstetrical reminiscences, James S. Smith; discussion of both papers by C. C. Wyckoff, Samuel G. Dorr, S. S. Green and others.

June 5th, Surgery—Subject to be announced, Charles E. Congdon.

June 12th—Annual meeting of the Academy.

June 19th, Pathology—Subject to be announced, Herbert U. Williams.

June 26th, Obstetrics—Quarterly meeting of the Academy—Subjects to be announced, M. A. Crockett; Lillian C. Randall; Maud J. Frye.

THE Medical Society of the County of Chautauqua held its annual meeting at the hotel Atheneum, Chautauqua, N. Y., July 11, 1899, Dr. Morris N. Bemus presiding. The following officers were elected for the next year: President, V. M. Griswold, Fredonia; vice-president, E. A. Scofield, Bemus Point; secretary, C. A. Ellis, Sherman.

The semiannual meeting will be held at Jamestown. The program was carried out with but one exception and the attendance was the largest that has ever been known. Dr. Morris illustrated his paper with a manikin and Dr. Seaver had present Mr. Sheldon, of Erie, Pa., who had worn a spinal brace over forty years of his own manufacture, and one that seemed to be ideal. The evening paper was illustrated by stereopticon lights and was given in the spacious parlors of the hotel.

Dr. Jane Greeley, of Jamestown; Drs. C. W. Southworth and V. D. Bozovsky, of Dunkirk and Dr. Francis Hunt, Dewittville, were elected to membership.

MORE than 100 international congresses of various kinds are to be held in Paris next year during the course of the exposition. A certain number of these of more special medical interest have already been announced in the columns of the *Medical News*. Just about the time of the International Medical Congress, that of from August 2d to 9th, the following congresses on subjects of more or less importance to medical men are to be held: An International Congress of Applied Chemistry from July 23d to the 31st; International Congress for the Amelioration of the Condition of the Blind, August 5th; International Congress of Public Charities and Philanthropy, July 30th to August 5th; International Congress of Deaf Mutes during the first week in August; International Congress of the Medical Press sometime during Medical Congress week; International Dental Congress, August 8th to 14th; International Congress of Professional

Relations and Deontology (the science of duties) from July 23d to 28th; International Congress of Psychology, August 22th to 25th; International Congress of Hygiene, August 10th to 17th.—*Medical News*.

THE last regular meeting of the Niagara Falls Academy of Medicine was held Monday, August 7th, at 8.45 p. m., at the office of Doctor F. R. McBrien, 113 Falls street. A paper was read by Dr. Scott on the Obstetrical forceps.

THE Association of Military Surgeons of the United States will hold its annual meeting at Kansas City, Mo., September 27, 28 and 29, 1899, under the presidency of Major J. D. Griffith, M. D., U. S. V., of Kansas City. Major James E. Pilcher, M. D., U. S. Army, of Carlisle, Pa., is the secretary.

COLLEGE AND HOSPITAL NOTES.

OFFICERS of the Pan-American Exposition Company have taken up the task of forming a medical bureau that will work while the exposition is being held. Nothing definite has yet been done and any plans that may have been formed are only tentative.

Omaha, with an attendance of nearly 3,000,000, had 3,095 sick cases within the exposition gates. The most of them were from exhaustion and minor causes, the number of serious cases being small.

Chicago, with an attendance more than ten times as great, had 11,602 cases of sickness on the grounds, but most of these, as at Omaha, were minor cases.

An examination shows that most of the cases at both places were those of exhaustion, people being overcome by heat, or old people simply tired out. The hospitals were not intended to accommodate patients for a great length of time, twenty-four hours being the longest period they were held.

It is proposed to build for the Pan-American Exposition a perfect hospital for temporary cases, all persons not discharged within twenty-four hours to be sent to some of the city hospitals. There will be a corps of nurses and doctors, just as in any other hospital, and all necessary appliances for such cases as will probably be

treated. It is expected that there will be some accident cases, and an ambulance corps will be established.

Judging from Omaha and Chicago figures, there will be about 5,000 cases for the Pan-American hospital.—*Buffalo Evening News*.

Book Reviews.

THE PRINCIPLES OF BACTERIOLOGY. A practical manual for students and physicians. By A. C. Abbott, M. D., Professor of Hygiene and Director of the Laboratory of Hygiene, University of Pennsylvania, Philadelphia. New (fifth) edition, enlarged and thoroughly revised. Duodecimo, 585 pages, 109 illustrations, of which twenty-six are colored. Philadelphia and New York: Lea Brothers & Company.

The popularity of Abbott's treatise is accounted for largely from the fact that it is so practical in character. When five editions are demanded of a work on bacteriology within eight years, is is pretty complete evidence that it has taken hold of the student and teacher. Abbott, in our view, has done more than any other author to popularise the study of bacteriology by the general practitioner of medicine.

A certain amount of bacteriological knowledge is essential to the intelligent practice of medicine in everyday life. Neither specialist nor general physician can get along smoothly with his work without this important aid to diagnosis, and we had almost said that he cannot proceed to an intelligent understanding of the subject without Abbott's book. At all events, we feel justified in affirming that this treatise will simplify the practical pursuit of the study of bacteriology.

The present edition has been revised to date, and many chapters, particularly those upon technique, disinfection, specific infections, immunity, and the like, have been enlarged. Equally thorough has been the revision and improvement of the illustrations, both black and colored.

Confidence in a still greater demand for this new edition is shown in the fact that notwithstanding an increase of some 50 pages, and the addition of illustrations in black and colors, the price of the book has not been advanced.

TRANSACTIONS OF THE SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION. Eleventh annual session, held at Memphis, Tenn., December 6, 7 and 8, 1898. William E. B. Davis, M. D., Secretary.

The value of preserving society proceedings in permanent form is demonstrated again and again by the admirable report that comes to us year by year of the transactions of this staunch and progressive association. We are constrained to make this remark from the fact that many medical societies have established journals as their organs and put forth their transactions mixed with other matter in periodical form. It seems to us there are several objections to

journalising the proceedings of special societies, the chiefest of which is that such a plan deprives the searcher of the literature of any particular subject, or group of subjects, of the opportunity of finding readily that information for which he is on the lookout. The completeness of a single volume wherein a year's work of distinguished specialists may be found carefully recorded, well printed and properly indexed, is such a great satisfaction that the experienced writer would be slow to exchange it for a medical journal appearing at various periods throughout the year.

For instance, in the present volume the article on Thoracic resection for tumors growing from the bony wall of the chest, by Professor F. W. Parham, of New Orleans, occupies about 150 pages. It is a most discursive, elaborate and exhaustive monograph and its value would be very materially detracted from were it split up into parts and printed in a medical journal as a serial. If it be argued that society transactions, as a rule, are slow in appearing, a circumstance always due to the tardiness of the members themselves, in furnishing copy or revising proof, it may be answered that very complete abstracts of proceedings, embracing synopses of papers and discussions, appear promptly in some magazine devoted to the specialty which concerns the society interested; whereas, later, the volume is printed giving a complete setting forth of everything said and done at the meeting from the merest interlocutory motion to the completest and most scientific of papers. The society thus has the benefit of a double publication of its work—one, immediate, in quite full abstract, and the other remote and absolutely complete.

The present volume is one of the best this distinguished association ever published, and this in spite of the fact that its last meeting was held in the midst of one of the most remarkable storms that the country has experienced in many years,—one that materially embarrassed travel to and from the meeting.

The book closes with a memorial sketch of Dr. Cornelius Kollock, written by Dr. Richard B. Maury, and is accompanied by an excellent half-tone portrait of this genial and accomplished South Carolinian.

A REVIEW OF RECENT LEGAL DECISIONS AFFECTING PHYSICIANS, DENTISTS, DRUGGISTS AND THE PUBLIC HEALTH. Together with a Brief for the Prosecution of Unlicensed Practitioners of Medicine, Dentistry or Pharmacy, with a Paper upon Manslaughter, Christian Science and the Law and Other Matter. By W. A. PURRINGTON, of the New York Bar, Counsel of the Dental Society of the State of New York; Lecturer of Medical and Dental Jurisprudence in the New York College of Dentistry, and one of the collaborators in *A System of Legal Medicine*, by Allan McLane Hamilton and others, etc. Duodecimo, pp. 105. New York: E. B. Treat & Co. 1899.

The cases and decisions presented in this book are well reviewed by Mr. W. A. Purrrington of the New York Bar, who is now identified as a writer and lecturer of reputation in medical jurisprudence. The increase in the number of legal cases, specifically affecting these professions and of legal cases demanding for their elucidation, expert

knowledge in these vocations has become so great, that their collections in a volume by themselves is fully justified.

When, however, in addition to their being thus made of ready access, they are by so qualified a person as Mr. Purrington divested of dry extraneous matter and made as reliable as interesting, there would appear nothing omitted to fit them for the purpose intended.

Brevity is attained without sacrificing particular or important matter. Criticism is to the point and instructive, references are exact and complete, the arrangement simple.

It covers the field of medicine, dentistry, pharmacy and public health; it should and undoubtedly will find its way to the library of the lawyer as well as those of the professions concerned. For the reasons specified, many will feel it fills a decided want.

The publisher for his enterprise, and the author for the quality of his work, has placed us under obligations. W. H. H.

A TREATISE ON HUMAN PHYSIOLOGY. For the Use of Students and Practitioners of Medicine. By HENRY C. CHAPMAN, M. D., Professor of Institutes of Medicine and Medical Jurisprudence in the Jefferson Medical College of Philadelphia. New (second) edition, thoroughly revised. In one handsome 8vo. volume of 921 pages, with 595 engravings. Philadelphia and New York : Lea Brothers & Co. 1899.

Since Dalton, fresh from the teachings of M. Claude Bernard, at Paris, began to instruct his pupils through experimental research, the study of physiology has shot forward with wonderful speed. Now, however, it is not sufficient to present a treatise to student or practitioner of medicine based alone upon laboratory experiments. While the importance of those have not diminished, but are rather increasing with the advance of time, there must be added to this method of investigation, those developed upon comparative and pathological anatomy, clinical medicine, physics and chemistry. Such a work Chapman sometime ago presented to the medical profession and its popularity is well attested by a demand for a second edition so soon after the first was put forth. In this revision the author has adhered to his fundamental plan, but has recast the details. Physiological chemistry has come forward with claims of vast importance that must be recognised, and the functions of the nervous system have become better and better understood with each advancing year, hence important changes and additions have been made, and that which has diminished or ceased in importance has been eliminated. The book, therefore, remains about the same size as at first, and is even more useful as a text-book, while the price has been lowered, bringing it within the reach of all who need it.

In the department wherein he considers the physiology of the nervous system Chapman is particularly strong, and no student or practitioner will be disappointed in following his book in this important branch. He is very interesting, too, in dealing with the special senses, and here, as is indeed, all through the book, his English is clear and fluent, and his sentences are terse and full of meaning. The high position already taken by this work will not only be maintained through the excellence of this edition but we feel sure must be greatly enhanced.

THE SERUM DIAGNOSIS OF DISEASE. By RICHARD CABOT, M. D., Physician to Out-patients, Massachusetts General Hospital. Small 8vo, pp. vii.—154. New York: William Wood & Company. 1899.

This book according to the author's statement is a compilation, its aim being to group in convenient form the vast work that has been done upon serum diagnosis since 1896. Impressed with the importance of pursuing further investigation upon the subject as related to fevers rife among the soldiers in our new possessions, the author went to Cuba and Porto Rico last year and took up the investigation for himself. In the United States general hospital, at Ponce, he found several hundred fever cases nearly all of whom were receiving large doses of quinine simply because the diagnosis between typhoid and malaria had not been established. Proceeding with the investigation Cabot examined 177 cases at the hospital in question where, strange to say, he found not a single case of malaria among them. On the other hand he states that 90 per cent. of those examined showed prompt and intense serum reaction for typhoid disease. Upon this evidence, supplemented with that previously obtained in fifteen cases by the pathologist of the hospital, the wholesale administration of quinine was checked and the typhoid cases needing diet were indicated. We mention this merely to emphasise the important part serum not only plays in diagnosis but in indicating the line of treatment to be pursued.

This method of diagnosis is yet in the hands of comparatively few men, and it is to stimulate its more general use among general practitioners of medicine that Cabot has prepared this book. In it he has only recorded facts already known or established, avoiding as far as possible the theoretical. This brings it well within the range of safety as a guide to general practitioners of medicine, to whom we especially commend it. It contains a complete bibliographical list up to the present year and all through the work the references are numerous.

CHEMISTRY: General, Medical and Pharmaceutical, including the Chemistry of the U. S. Pharmacopeia. By JOHN ATTFIELD, F. R. S. Sixteenth edition. In one royal 12mo volume of 784 pages, with eighty-eight illustrations. Philadelphia and New York: Lea Brothers & Company. 1899.

This standard work, true to its traditions, again appears with all its essentials brought forward to the immediate present. The frequency with which the several editions of the book have been brought out has enabled the author to keep pace with events and to the claims of this treatise all the freshness of a new work by a new author. At the same time, too, it possesses the additional advantages of being the consensus of years of experience in teaching and writing upon chemistry.

This edition is adapted to both the pharmacopeia of the United States and that of Great Britain. When we consider the great strides made in chemistry within the last few years, the task of keeping such a work well to the fore and at the same time eliminating whatever as been superseded or become obsolete, is not an easy one.

That the author has done all this and more, will be acknowledged by those familiar with the successive editions, as they have appeared. The size of the volume, however, still remains within the limits belonging to a manual.

The special advantage of this work is its adaptability to medical and pharmaceutical needs, making it valuable to both student and practitioner of medicine. Its voluminous index makes its contents readily accessible.

SURGICAL NURSING. By BERTHA M. VOSWINKEL, Graduate of Episcopal Hospital, Philadelphia; late nurse-in-charge of Children's Hospital, Columbus, O. Second edition, revised and enlarged, with 112 illustrations. Philadelphia: P. Blakiston's Son & Company: 1899.

This work on surgical nursing is in its second edition, a fact which is of itself a recommendation for the book. It is plainly written, concise and well illustrated. Barring a few rather careless typographical errors, there is nothing to criticise, and it strikes the reviewer as being a work which the nurse who felt her training deficient in the care of surgical cases would find very helpful.

M. J. F.

PROCEEDINGS of the American Medico-Psychological Association at the Fifty-fourth annual meeting, held at St. Louis, Mo., May 10-13, 1898. Published by the Association. Edited by the Secretary, Dr. C. B. Burr, Flint, Michigan.

This volume contains some twenty-five papers on subjects interesting to the alienist. The presidential address, delivered by Dr. Bucke, of London, Ont., clearly points out that many cures result among the female insane from operations upon the reproductive organs when they are diseased. Dr. Eskridge, in the annual address, outlines very completely the requirements of a hospital for the study of scientific psycho-neurology. Dr. Brower's excellent essay on the judicious training of neurotic children is sufficiently clear and concise to be read with advantage by the laity as well as members of the profession. The other contributions are well written and ably discussed. The publisher's work is also well done.

J. W. P.

THE MEDICAL NEWS POCKET FORMULARY FOR 1899. Containing 1,600 prescriptions representing the latest and most approved methods of administering remedial agents. By E. QUIN THORNTON, M.D., Demonstrator of Therapeutics, Pharmacy and Materia Medica in the Jefferson Medical College, Philadelphia. In one wallet-shaped volume, strongly bound in leather, with pocket and pencil. Philadelphia and New York: Lea Brothers & Co. 1899.

One of the handiest little volumes issued this year is the Medical News Pocket Formulary, by E. Quin Thornton, M. D.

The use of a pocket or any other kind of a formulary as a regular practice is not good medicine, but the fact remains, nevertheless, that these little volumes are valuable adjuncts to a practice. They represent the collective experience of the profession when they are

carefully compiled as this one has been. There are many cases constantly arising in which for the time being a drug has slipped out of memory. Here is where a formulary comes in handy. And then it is a most useful between-times reminder. Picked up at odd moments and glanced through it will certainly add something to the mental storehouse, which will be of use later.

There is an apparent effort throughout to summarise the best therapeutics without regard to age, novelty or fads. The diseases are arranged in alphabetical order, and the best treatment is outlined according to the indications which are given in brief but comprehensive form. The Medical News Formulary is valuable because it is good, it is invaluable because it is safe.

N. W. W.

PRACTICAL MATERIA MEDICA FOR NURSES, with an Appendix. Containing Poisons and their Antidotes, with Poison Emergencies, Mineral Waters, Weights and Measures, etc., etc. By EMILY A. M. STONEY, Graduate of the Training School for Nurses, Lawrence, Mass., etc., etc. Duodecimo, pp. 306. Philadelphia; W. B. Saunders. 1899.

This book is compiled by Emily A. M. Stoney, who a few years ago wrote a very good book for nurses, entitled, *Practical points in nursing*. This volume contains all that a nurse needs to know concerning the source, action and use of drugs, dosage, and the symptoms and treatment of poisoning. We doubt not that superintendents of training schools will find it an excellent help in the work of the class-room and that graduate nurses who wish some work on materia medica will be pleased with this one.

M. J. F.

FEVER NURSING. Designed for the Use of Professional and Other Nurses, and especially as a Text-book for Nurses in Training. By J. C. WILSON, A. M., M. D., Professor of the Practice of Medicine and of Clinical Medicine in the Jefferson Medical College; Visiting Physician to the Hospital of the Jefferson College and the Pennsylvania Hospital; Physician-in-Chief to the German Hospital, etc., etc. Third edition, revised and enlarged. Philadelphia: J. B. Lippincott Company. 1899.

The series of practical lessons in nursing, to which this volume belongs is too well known to need introduction or commendation. The third edition of this book on fever-nursing has been brought down to date and now includes the duties of the nurse in the care of soldiers suffering from febrile disease in camp and in transportation, as well as an article upon the oriental plague.

M. J. F.

BOOKS RECEIVED.

The Treatment of Pelvic Inflammations Through the Vagina. By William H. Pryor, M. D., Professor of Gynecology, New York Polyclinic; Consulting Surgeon, City (Charity) Hospital, etc. 12mo, pp. 248. With 110 illustrations. Philadelphia: W. B. Saunders. 1899.

Mt. Sinai Hospital Reports. Volume I. For 1898. Edited for the Medical Board by Paul F. Mundé, M. D. New York: Stettiner Bros. 1899.

Annual Report of the Supervising Surgeon-General of the Marine Hospital Service of the United States for the fiscal year 1898, Centennial Year. 8vo, pp. 855. Washington: Government Printing Office. 1899.

The Hygiene of Transmissible Diseases: Their Causation, Modes of Dissemination and Methods of Prevention. By A. C. Abbott, M. D., Professor of Hygiene and Director of the Laboratory of Hygiene, University of Pennsylvania. Octavo volume of 311 pages. Illustrated. Price, \$2.00 net. Philadelphia: W. B. Saunders, Publisher.

General Pathology, or the Science of the Causes, Nature and Course of the Pathological Disturbances which occur in the living subject. By Dr. Ernst Ziegler, Professor of Pathological Anatomy and of General Pathology at the University of Freiburg in Breisgau. Translated from the ninth revised German edition, by Drs. Theo. Dunham, E. M. Foote, Philip H. Hiss, Jr., Walter B. James, Wm. G. Le Boutillier and Matthias Nicoll, Jr., of New York; Dr. B. Meade Bolton, of Philadelphia, Pa., and Drs. Leonard Woolsey Bacon, Jr., John S. Ely and R. A. McDonnell, of New Haven, Conn. Editor, Dr. Albert H. Buck, of New York. Complete in one octavo volume of 621 pages, profusely illustrated by 544 wood engravings in black and numerous colors, and lithographic plate. Bound in extra muslin at \$5.00 net, and in brown sheep at \$5.75 net. New York: William Wood & Co. 1899.

A Text-Book of Pharmacology and Therapeutics, or the Action of Drugs in Health and Disease. For the use of Students and Practitioners of Medicine. By Arthur R. Cushny, M. A., M. D., Aberd. Professor of Materia Medica and Therapeutics in the University of Michigan Medical Department, Ann Arbor. In one octavo volume of 728 pages, with 47 engravings. Cloth, \$3.75 net. Philadelphia and New York: Lea Brothers & Co. 1899.

A Text-Book of Diseases of the Nose and Throat. By D. Braden Kyle, M. D., Clinical Professor of Laryngology and Rhinology, Jefferson Medical College, etc., etc. Octavo, pp. 646. With 175 illustrations, 23 of them in colors. Price, \$4.00, cloth; sheep and one-half morocco, \$5.00, net. Philadelphia: W. B. Saunders. 1899.

International Clinics. A Quarterly of Clinical Lectures on Medicine, Neurology, Surgery, Gynecology and Obstetrics, Ophthalmology, Laryngology, Pharyngology, Rhinology, Otology and Dermatology, and Specially Prepared Articles on Treatment and Drugs. By professors and lecturers in the leading medical colleges of the United States, Germany, Austria, France, Great Britain and Canada. Edited by Judson Daland, M. D. (Univ. of Penna.), Philadelphia, Instructor in Clinical Medicine and Lecturer on Physical Diagnosis in the University of Pennsylvania; Assistant Physician to the Hospital of the University of Pennsylvania, etc.; Fellow of the College of Physicians of Philadelphia. Volume II. Ninth series. 1899. Octavo, pp. x.—310. Philadelphia: J. B. Lippincott Co. 1899.

Over 1,000 Prescriptions or Favorite Formulæ of Various Teachers, Authors and Practicing Physicians. The whole being carefully indexed, and including most of the newer remedies. Cloth, 300 pages; postpaid, \$1.00. Detroit, Mich.: The Illustrated Medical Journal Co., Publishers. 1899.

Transactions of the Medical Association of Central New York. Thirty-first annual meeting held at Auburn, N. Y., October 18, 1898. William C. Krauss, M. D., Editor. Volume V. Buffalo: Buffalo Medical Journal Print. 1899.

American Pocket Medical Dictionary. Edited by W. A. Newman Dorland, A. M., M. D., Assistant Obstetrician to the Hospital of the University of Pennsylvania, etc. Containing the pronunciation and definition of over 26,000 of the terms used in medicine and the kindred sciences, along with over 60 extensive tables. Second edition, revised. Price, \$1.25 net. Philadelphia: W. B. Saunders. 1899.

Handy Book of Medical Progress; A Lexicon of the Recent Advances in Medical Science. By Charles Warrenne Allen, M. D., and Jacob Sobel, M. D. One volume, post, 8vo. Extra buckram, \$1.50 net. William Wood & Company. 1899.

Surgical Nursing. A Compilation of the Lectures upon Abdominal Surgery, Gynecology and General Surgical Conditions and Procedures, delivered to the classes in the training school for nurses connected with the Woman's Hospital of Philadelphia. By Anna M. Fullerton, M. D., Clinical Professor of Gynecology in the Woman's Medical College; Obstetrician, Gynecologist and Surgeon to the Woman's Hospital. Third edition, revised and enlarged, with 69 illustrations. Price, \$1.00. Philadelphia: P. Blakiston's Son & Co. 1899.

LITERARY NOTES.

WARNER'S Pocket Medical Dictionary is a most convenient little work. The latest medical terms have all been added, 10,400 words, terms and phrases are spelled, pronounced and defined. The definitions are concise and comprehensive and the type is bold and easily readable. The paper and binding are especially serviceable. It is bound in flexible leather, with round corners, colored edges. It contains complete tables of arteries, bacilli, spirilli, streptococci, micrococci, bacteria, muscles, nerves, and a dose table. This latter comprises a complete list of all drugs with their doses arranged in apothecaries' measure and their metric equivalents. It is well written and will prove a valuable addition to the library of quick reference books of any physician. It will be sent to any address upon receipt of 75c., stamps or money order. Address, W. R. Warner & Co., Philadelphia.

THE St. Louis *Courier of Medicine* which was published for more than ten years, during which time it attained high rank as a progressive medical journal, and was afterward discontinued, has been revived. The present editors are: Dr. C. R. Dudley, editor-in-chief, and Drs. Joseph Grindon, Elsworth F. Smith, W. A. Shoemaker, associate editors. We welcome the return of this sturdy journal with cordial greeting.

THE Texas *Clinic* is the name of a monthly journal devoted to practical medicine and surgery, published at Dallas, Texas. It is edited by Drs. P. L. Campbell, S. E. Milliken, E. A. Aronson and J. E. Wilson. The first numbers make an excellent appearance. The subscription price is \$1.00 a year.

THE *Quarterly Medical Journal* will hereafter be edited by Christopher Addison., M.D., B.S. Lond., F.R.C.S. All letters or

exchanges should in future be addressed to "The Editor, 7, Leopold Street, Sheffield."

The editor of this excellent magazine announces that it will in future be issued in the months of November, February, May and August, instead of in October, January, April and July, as has previously been the case.

THE *Occidental Medical Times*, which has for twelve years been published at Sacramento has been removed to San Francisco and consolidated with the *Pacific Record of Medicine and Surgery*. The former editor of the *Medical Times* assumes editorial management of the new magazine, with the former editor of the *Record* as his assistant. We join with the editors in anticipating in this union of interests an improvement in the medical journalism of the Coast.—*Columbus Medical Journal*.

THE *Illinois Medical Journal* has lately been issued as the official organ of the Illinois State Medical Society. It is a monthly bulletin, edited by a publication committee made up as follows: Dr. E. W. Weis, chairman, Ottawa; Dr. H. M. Moyer, Chicago, and Dr. G. N. Kreider, Springfield. The July issue contains the proceedings of the last meeting of the society at Cairo, several original articles, editorials, biographies, correspondence, news items, and the like. The arrangement is good and it is well edited.

ITEM.

BRIGHAM HALL, a hospital for the insane, located at Canandaigua, is one of the best institutions of its kind in the country. Dr. D. R. Burrell, the resident physician, is one of the most experienced men in that department of medicine and his assistant, Dr. E. J. Gillette, is a very competent man. Of late the hospital has received voluntary patients. Cases of neurasthenia, and of the alcohol or drug habit, who are not insane, but are willing to conform to the regulations of the hospital, and to the advice of the physicians will continue to be received on voluntarily signing a request for admission.

MISCELLANY.

THE recent storms in Porto Rico have been so disastrous to life and property that an appeal is made to the people of the United States to contribute to their relief. The Merchants' Association of New

York has appointed a relief committee, with Governor Roosevelt as chairman, that has sent out the following appeal :

To the People of the State of New York :

More than 100,000 people of Porto Rico are dependent upon the charity of this country. They have been in a moment reduced to complete destitution. Their homes have been swept away, their business prostrated, their occupations stopped. Thousands of families are without roofs, without clothing, without food. They have no means of subsistence or protection. The usual resources of the Island are paralysed. They cannot help themselves, and I appeal to the people of the great State of New York to lead in giving them the relief so urgently needed.

The calamity which has befallen the people of Porto Rico is one of the greatest disasters of modern times, and many thousands will die from exposure, disease and famine unless the generosity of our countrymen comes promptly and largely to their relief.

By request of the Secretary of War, the Merchants' Association has undertaken this work, and I appeal to all patriotic citizens to show to the suffering people of our new possessions that the extension of our flag over their territory is to be of immediate material as well as moral benefit to them.

Large amounts of money are necessary to purchase food, clothing and medical supplies immediately, which will be distributed under supervision of the U. S. Army officers.

Checks may be made payable to S. C. Mead, treasurer, Porto Rico Relief Committee, The Merchants' Association of New York, 346 Broadway, New York City.

THEODORE ROOSEVELT, Chairman.

STATE OF NEW YORK—CIVIL SERVICE EXAMINATIONS.—Open competitive examinations will soon be held in various cities throughout the state for the positions mentioned below; candidates having applications on file will be given ample notice of the time and place of examination most convenient to their places of residence.

Intending competitors must file application in the office of the commission at least five days before the examination. No one will be admitted to examination without the official notice (form 8) from the chief examiner of the commission.

The following examinations will be held on or about September 30, 1899: Apothecary, bookkeeper, clerk, regents' clerk, fireman, inspector of public works, matron, messenger, page, physician, storekeeper.

Examinations for stenographers and typewriters will be held during the week beginning October 9, 1899.

For application blank and detailed circular, address State Civil Service Commission, Albany, N. Y.

BUFFALO MEDICAL JOURNAL.

VOL. XXXIX.—LV.

OCTOBER, 1899.

No. 3.

Original Communications.

MALARIA COMPLICATING THE PUERPERIUM.¹

By GEORGE A. HIMMELSBACH, M. D., Buffalo, N. Y.

Assistant Attending Physician, Buffalo General Hospital; Attending Physician, Erie County Hospital.

MALARIA complicating the puerperium is not a new subject, yet from what I have been able to learn from a liberal review of literature, it is one that has not been worn threadbare.

The occurrence of a sudden rise of temperature to 103° or 104° any time during the ten days subsequent to the confinement, is one which sends a thrill of intense anxiety through the mind of the medical attendant, to say nothing of the uncomfortable feeling experienced by the patient, and her newly born as well.

In the event of a sudden rise of fever during the first few days, one's first thought is endometrial infection. We perhaps chide ourselves for erring in our asepsis or antisepsis, and immediately begin a review of our case to determine whether we have committed some gross error in cleanliness, whether the secundines were entirely removed, or whether there has been a relaxation of the uterus with blood clots, intrauterine or intravaginal, that are breaking down. We give our nurse a rigid interrogation as to her method of cleanliness, douching, bathing, activity of the patient's bowels, and the like. All these may be negative, and yet how difficult it is to divert our thoughts away from endometrial infection. So difficult, indeed, that a mistaken diagnosis is too hastily made, and our patient is too often subjected to the unpleasant ordeal of intrauterine cleansing, disturbing a normal endometrium in the process of resolution, and again opening up an avenue of infection.

1. Read at the semi-annual meeting of the Medical Society of the County of Erie, June 13, 1899.

I maintain in my paper that, with our modern improved methods of asepsis and antepartum cleanliness, which every physician nowadays carries out, or should carry out, we ought not to ignore the question of parturient infection entirely, but our attention to this particular should be correspondingly lessened, and more thought given to other intercurrent diseases, which may be mentioned as causes of pyrexia during the puerperal period, such as pleurisy, pneumonia, rheumatism, any of the acute exanthemata, intestinal toxemia, breast infection, endo- or pericarditis and malaria.

I think we can consider malaria as one of the most important intercurrent diseases of the puerperium, not only because women recently confined have an increased susceptibility to the disease, a fact now generally conceded, but especially because the disease, so often simulates sepsis, from which it is of the utmost importance that it be differentiated.

We are told that women who have been residents of a malarial climate, and who have the plasmodium lurking in their systems, and yet have no manifestations of the disease, almost always suffer from paroxysms following labor; whether this is the direct result of the traumatism of the labor or hemolytic changes, the result of blood loss, is still a mooted question.

The title of this paper was suggested to my mind from the fact that I have met with several undoubted cases of malaria, complicating the child-bed, in my own practice. Judging from this, I thought that an abundance of material could be found from which to study, and to incorporate in this paper, but it has been a surprise to me, after a thorough search of current literature of the past ten years, and even our latest text-books, to find the scarcity of references to this subject. Upon interviewing men of wide obstetric experience, in our own city, I am told of the frequency of its occurrence, and the too often error in diagnosis, mistaking it for infection of the parturient canal. One writer says he has knowledge of a case in which a high fever developed after childbirth, and the obstetrician in charge supposing the fever to be septic, curetted and irrigated the uterus, without benefiting the patient's condition. It was discovered later, the woman had a croupus pneumonia. Similarly, I say a woman may be curetted unnecessarily who suffers from malaria, rheumatism or any other febrile disease.

J. D. Rowlings, *Lancet*, August 7, 1897, says that if in the first three days of the puerperium, the temperature rises without obvious cause to 102°F. and is accompanied by a pulse rate of 120 or more,

the case should be regarded, provisionally, as septic. This may be good advice, and in a measure true, yet, note how guarded he is in saying "without obvious cause" and "provisionally septic." I say even at or before the third day we should not forget the possibility of malarial infection as a cause of pyrexia.

M. Salowieff, in a French journal of June, 1894, relates the case of a woman suddenly attacked by an intense fever at the end of her pregnancy; of another in whom the fever came on two weeks after the delivery, and of a third who was affected about the middle of her pregnancy. In all cases the treatment with quinine and opium associated with arsenic was effective. He further states that malaria may be the cause of abortion, premature delivery, or in some cases death of the fetus. In those recently delivered it interferes with the milk secretion. He attaches great importance to the diagnosis of this fever from other affections of the child-bed, especially from puerperal septicemia.

The diagnosis and differential diagnosis, is sometimes very difficult, and it is a safe rule to reserve your opinion until you have made thorough enquiries into the case and have satisfied yourself that the parturient canal is unaffected.

The appearance of the temperature curve is very suggestive; as a rule, the first chill and pyrexia appear on the third day following the confinement; this, however, is not always so; they may come at any time during the period.

The duration and marked remission of the fever, and the quite regular periodicity, with a pulse the frequency of which keeps pace with the temperature curve are diagnostic. It is sometimes quite difficult under the circumstances to examine the spleen, but we are told that it is invariably enlarged.

The subjective examination of our patient is especially important. We should arm ourselves with the history of her previous health; whether she has ever had an attack of malaria, even though remote, perhaps years previous, for I was told by a prominent obstetrician sometime ago, that he was of the firm conviction that a person once a sufferer from this disease, never, in spite of heroic antimalarial treatment, and in spite of no apparent manifestation of the disease, the organism never becomes thoroughly eradicated, and that it exists throughout life. This I think is quite generally accepted.

A thorough investigation as to the sanitary condition of the surroundings should be made as to whether there are pools of stagnant

water in the cellar, or under the house, where no cellar exists; or in vacant property adjoining; whether there has been any recent excavation of soil for cellar building, for street paving, for laying new sewers, gas or water mains. These are of importance.

Finally, two great diagnostic points in malaria, suggested by Osler, in a paper on this subject in 1896, are the invariable association of the plasmodium of Lavarán and the invariable curative effects of quinine.

In the *Archives de Toxologie*, January, 1892, Aberlin reports a study of forty-six cases of malaria complicating the puerperium. He believes that in order to be certain that febrile attacks in the puerperium are due to malaria, it is necessary to exclude all causes of high temperature due to local disturbances of the genitals and the breasts. He believes that malaria is not more severe during the puerperium than at any other time, and if treated from the start is not a serious complication.

Sewell, in the Cincinnati *Lancet Clinic*, of January, 1892, relates a case of intermittent malarial fever, which developed twenty-four hours post partum.

Miller, in the Kansas City *Medical Index*, May, 1892, reports a case of chronic malarial poison, complicating the puerperal state, in which tetanus developed.

I herewith append memoranda of several of my own cases :

Case I.—Mrs. G., age 30 years, primipara, confined July 15, 1895, labor normal; secundines removed entire; contractions good; puerperium uneventful until July 30th (14 days) when taken with severe chill, followed by high fever, and general feeling of malaise and discomfort. Examination discovered two sloughing ulcers, one on each labium at vaginal entrance. Some necrosis of soft parts. She complained of vesical tenesmus and a urinalysis discovered pus cells present—but these might have come from urine passing over the external wounds.

Counsel was called and we decided to curette and irrigate. This was done, but nothing was found intrauterine, sufficient to account for the pyrexia. The following day she again had a chill about the same time, followed by high temperature, and again the third day. Dr. Frederick saw the case with me and suggested the administration of quinine in fifteen or twenty grain doses. This therapy was continued for ten days or so, and completely controlled the paroxysms, except on the fifth or sixth day, when the drug was intentionally omitted, which resulted in the recurrence of another paroxysm of rigor and temperature, but much milder than the previous attacks.

The treatment in this case proved conclusively the diagnosis of malaria. A thorough search of the premises was made, there being

no antecedent history of the disease, and it was found that in the vacant property adjoining the house in which my patient resided, were pools of stagnant water, which had stood for a long time prior to her confinement.

Case II.—Mrs. H., age 31 years, multipara, delivered November 27, 1896, third confinement, which was six hours long; normal; secundines removed intact; uterine contractions good; puerperium normal until December 1st, when taken with a chill, followed by fever; this occurred three days in succession and each succeeding day more intense than the previous one; the third was a very severe rigor. Lochia was normal in amount and odor. By a process of exclusion I satisfied myself I had to deal with a case of malarial infection. Quinine sulphate was given in large doses, with no return of the paroxysms. I learned upon examination that the street in which my patient resided had been recently excavated and torn up from end to end, for the purpose of laying large (two foot) gas mains and for paving the street. This history coupled with the fact of controlling the paroxysms with quinine sulphate, confirmed my diagnosis.

Case III.—Mrs. M., age 22 years, primipara, confined March 27, 1897. About the seventh month of her pregnancy she consulted me complaining of feeling poorly the latter part of each day. Said she experienced peculiar flashes pass over her body, which made her feel so miserable at the time she was obliged to lie down; she saw me several times during the next few weeks; a bimanual examination was made—negative. The urine normal. At the beginning of her ninth month she called and said she had nearly reached the limit of her endurance. The flashes had developed into distinct chills and each one followed by fever, headache, backache and general depression.

I now mistrusted what I had to deal with. She denied ever having had malaria, that she was aware of, but said that soon after her marriage she moved into a new house just completed, where the plaster and wood-work were still green. To satisfy my curiosity I called at her home, and to my surprise I found the house actually wet (not simply damp.) In some rooms, which were prettily frescoed and papered, the latter was falling from the walls in sheets. The cellar was in a most unwholesome wet state, water standing about in pools and the ground was soft and "knee deep."

My patient was immediately given quinine sulphate in large doses, against the alleged action of this drug as an ecboic. In a few days she felt entirely well. I gradually withdrew the drug as the date of her confinement drew near. All went well until the fourth or fifth day after her confinement, when the plasmodium again began to assert itself in the form of slight chills and elevation of temperature. She was again put upon quinine and continued for sometime with no further manifestations of the disease.

Case IV.—Age 24 years, seven to eight months pregnant; taken with chilly sensations, followed by high fever on Wednesday, May 17, 1899. This occurred again on the next day and the third day (Friday) with more severity, and she now began to feel in addition with the chills and fever, vague pains in her bones and body generally. On Saturday I saw her with a high fever, following a chill and pains resembling labor pains. On Sunday I was summoned and found her with a temperature of 103° ; pulse, 110; recurring pains and os dilating. On the evening of same day I delivered her of a premature child—probably seven to eight months. The following day she had a chill with temperature 103° and again the second day following confinement; lochia normal. I administered quinine sulphate, in ten grain doses every day, and in a few days chills and fever all disappeared. She informed me that a year previous, while living in Detroit, she suffered two months with malaria and was on quinine treatment for a long time. I believe in this case the diagnosis of malaria ante- and post partum was correct, based on the previous history of malaria and control of paroxysms with quinine; I believe, too, that the malaria was in a large measure responsible for the premature confinement.

In conclusion let me say that a favorable prognosis of a given case, depends upon a correct interpretation of symptoms and an early recognition of the disease.

Therapeutics properly directed will mitigate symptoms at once, and save an otherwise protracted siege of chills and fever and their usual sequelæ.

137 W. TUPPER STREET.

SOME MEDICO-LEGAL ASPECTS OF TRAUMA IN RELATION TO DISEASED CEREBRAL ARTERIES.¹

By WILLIAM C. KRAUSS, M. D., Buffalo, N. Y.

ONE of the most interesting questions in neurology, and one of the most important is the relation of trauma to disease of the nervous system. I do not mean a trauma sufficient to produce a fracture if applied to the cranium, or even to a laceration, if applied to the soft tissues, but a trauma apparently slight and of seeming little import at the time of its infliction. To those cases especially do I refer where serious, even fatal results follow a slight contusion, in certain individuals, while in others the same force would be scarcely if at all perceptible; and this brings me to the important and valuable services to be rendered by the microscope in elucidating the true cause of the various phenomena noted.

¹ Fragment of president's address before the American Microscopical Society, held at Columbus, O., August 17-19, 1899.

It is a well-known fact that the susceptibility of individuals differ; that is, what produces a serious condition of things in one would have no effect upon another. This susceptibility may be evidenced in one of two ways: first, by producing a class of disorders comprised under the head of the traumatic neuroses, usually functional and temporary, and, secondly, by calling forth a more serious class of disorders, which terminate in death itself, either primarily or through sequellæ. Such are injuries to the arterial system, weakened and degenerated by disease, either acquired or inherited. The vices, alcoholism and syphilis, produce upon the arterial walls, especially of the cerebral vessels, a degeneration and disintegration, which render them unsafe carriers of the blood even under the usual, normal blood pressure. When the pressure is increased, the tension becoming greater, then there develop, as Charcot pointed out in 1868, and Virchow previously in 1851, under the name of *ectasia ambulare*, small aneurismal protuberances, which under slight provocation, as shock, excitement or exertion, physical or psychical, burst, and permit the egress of blood under the high arterial tension into the surrounding brain tissues.

Of the two classes of disorders the first or functional are of less serious import and depend less upon a preëxisting pathological condition of the constituent elements of the nervous system than upon a general debasement or deterioration of the whole nervous organisation. There is found in those individuals an increased morbid reaction of the ganglionic nerve centers to all kinds of impressions, both mental and bodily, whether slight or profound, and is liable to manifest itself on very short notice and on the least provocation.

The microscope has been unable as yet to point out the degree of involvement of these nerve centers or even the area of involvement, but may at some future time render inestimable aid in solving one of the most complex questions in human neurology. This very absence of knowledge regarding its pathology has led to much controversy and debate regarding this affection. There are even some who look upon it with contempt under the mistaken idea that the barometric changes of disposition, tastes and feelings from day to day indicate a fraudulent basis. Studied originally by Erichsen, under the name of railway spine, this syndrome has been investigated by Rigler, Hodges, Page, Clevenger, Oppenheim, Strümpell, Dana, Outten, Knapp, Bailey, and in no uncertain way by Charcot and his pupils, and has received a galaxy of names, polyonymic as well as monony-

mic. The relation which the arterial system bears to the genesis of this affection is as yet not well defined, except in this much, that an artery diseased is a poor conduit for the passage of a fluid whose function in the brain is primarily to nourish and regenerate tired or worn out nerve cells.

Turning to the second class of disorders we meet a condition of the vessel walls long since recognised, and easily demonstrable by any one acquainted with microscopic technique. Doubt and uncertainty regarding the lesion, has long since disappeared and the student beginning the study of medicine is taught at the bedside and demonstrated in the laboratory the effects of an endarteritis and the structural appearance of the lesion. He is, moreover, taught that this condition of the vessel walls, leading to their deterioration, disintegration and destruction, when occurring in early manhood is attributable, in the great majority of cases, to two vices—alcoholism and syphilis—both unfitting the arteries for the work nature originally mapped out for them.

Three conditions are necessary for the normal circulation of the blood in the arterial system. First, the arterial walls must be capable of dilating without strain or injury to any of the coats of the arteries; second, the walls must be able to contract upon their contents, and third the lumen of the vessels must be preserved.

The elasticity of the vessel walls permits the blood to flow in an unbroken continuous current through the smaller bloodvessels and arteries, relieving them of the direct force of the heart's action. In fact the main force of the heart is spent in distending the larger arteries and the immediate propelling force of the circulation is the elasticity of the arteries in which the heart stores up the energy of its systole for the moment. The blood pressure is, of course, highest in the heart, considerable in the whole arterial system, though gradually diminishing toward the capillaries, in which it would be feeble; lower still in the smaller veins and at its minimum where the great veins enter the heart. It is estimated that the blood pressure of the carotids in man is not less than 150 to 200 millimeters of mercury. To supply a sufficient elasticity to the arterial walls, to withstand the force of the heart's action, the middle coat has been supplied with yellow elastic tissue, the importance of which, when diseased, is not to be overlooked or underestimated.

The contractility of the arteries has great physiological importance, but less pathological than the elasticity. In the smaller vessels by virtue of their contractile walls, the distribution of blood is

regulated to the various organs. Where the resiliency of the vessels is at fault, active or passive anemias or hyperemias of the brain and other organs are produced.

When the elasticity and contractility of the vessels are not impeded by disease and the lumen is not encroached upon, nutrition is carried on normally and the functions of the parts supplied are commensurate with their growth and development. Where the vessel walls are weakened by disease, the elasticity of the arteries is impaired, the resistance to the blood pressure is too feeble and hemorrhage from rupture takes place.

The disease leading to the weakening of the vessel walls has been variously designated by different names as arterio-sclerosis, atheroma, chronic endarteritis, endarteritis deformans and the like.

A pure and simple physiological process of old age, its earlier occurrence or the more extreme grades of its severity are dependent upon some toxic principle in the organism, prominent among which may be mentioned, syphilis, chronic alcoholism, gout, uremic manifestations and in some cases it is due to overstrain. Although the causes of arterio-sclerosis are well known, there exists diversity of opinion as to how these recognised causes operate. The opinion once in vogue that the inflammation started in the inner coats as a result of the irritation of the toxic or infectious agencies in the blood is no longer tenable. It seems fairly well established that the degenerative changes and loss of elasticity in the vessel wall are the result of the primitive causes, and the hyperplastic processes in the intima and other parts of the arterial wall are the ultimate result. (Stengel.)

Thoma believes that the degenerate vessel tends to dilate and to thereby slow the circulation; the slowing leads to hyperemia of the vessels, and to a consequent connective tissue new formation in the intima, which narrows the vessels. These changes also occur in the middle and outer coats.

Heubner, in 1874, first described accurately the changes taking place in the arteries, especially at the base of the brain, resulting in an arteritis or endarteritis, and found existing either as an independent disorder or as part of a local syphilitic affection. An endarteritis is found, due to the pouring out of round cells from the *vasa vasorum*, an endothelial proliferation, followed by thickening of the intima, fenestrated membrane and adventitia. As a result, the lumen of the vessel is narrowed, even occluded, or the intima becomes roughened and changed and a thrombus forms, which may in turn give rise to an embolus.

The process may be a diffuse one, but it is most commonly distributed irregularly, the inner surface of the vessel exhibiting patches of sclerosis separated by areas of comparatively healthy tissues, or is furrowed or wrinkled with irregularities. In many cases also there occurs a deposition of new material within the affected area of the vessel wall, this newly formed tissue being in some cases hyaline and nearly structureless ("hyaline degeneration"); in others containing round cells, few or many, embedded in a hyaline or gelatinous matrix. This newly formed tissue, furthermore, is very prone to early and extensive, slowly progressive, degenerative changes, fatty or, less frequently, calcareous in nature, which render the diseased areas more distinctly visible, giving rise to the familiar "atheromatous plaque."

In those cases in which the degenerative change is calcareous in character, the formation of irregular chalky masses, or of smooth "calcareous plates," is a common result. In extreme cases these deposits may involve the entire circumference of the vessel for long distances, rendering the arterial wall so brittle that instead of bending it fractures under application of force. The fatty and calcareous degenerative changes are often combined; indeed, in the more serious cases this is the general rule, the deposition of calcareous matter appearing as a later stage of the fatty degenerative atheroma.

The patches of atheroma are raised, usually encroaching slightly upon the lumen of the artery, although in ordinary cases they interfere only in a very minor degree with blood-flow.

There are three alterations which atheroma produces, each of which may, according to circumstances have important effects on the circulation.

These are narrowing of the caliber, loss of elasticity and rigidity of the wall and interference with the muscular contractility of the vessel. Thus it is seen that this process counteracts each one of the conditions so necessary for the normal circulation of the blood. Generally as a result of the weakening of the vessel walls by sclerosis or degeneration small saccular aneurisms, often called miliary aneurisms, develop in the end arteries of the brain, but especially in the arteries supplying the optic thalamus, corpus striatus and lenticular body, and the lenticulo-striate artery has even been designated by Charcot the apoplectic artery, because of its proneness to aneurismal development and consequent rupture.

Hemorrhage rarely occurs at the cortex of the brain because the smaller arteries and arterioles enjoy an intimate anastomosis with each other and any sudden increase in blood pressure is quickly

equalised through this anastomosis. Then, too, these arteries do not receive the direct flow of the blood from the carotids, and the blood pressure is perceptibly diminished by the time it reaches these arterioles. Arteries at the base of the brain are not so liable to rupture as the end arteries going to the large ganglia, because of their anastomoses in the circle of Willis and because of their tortuous course, which permits of considerable increased pressure before they straighten out and become tense. Aneurisms of small size, from a pea to a bean, are very prone to develop along these arteries and hence are next in importance to the lenticulo-striate artery as regards rupture.

The end arteries in the region of the internal capsule are so liable to rupture, because instead of having a system of anastomoses, they terminate in blind pockets.

When the large vessels at the base of the brain, that is, of the middle cerebral, posterior cerebral and the communicating arteries, have undergone calcareous degeneration the absence of the normal elasticity of these vessels allows the blood to pass with great force and directness into these end arteries and if the conditions are favorable, that is an endarteritis is present, the vessel walls will yield to the strain and become bulbous and then aneurismal. They may remain in this condition for some years even, but they are comparable to the faulty flues in a boiler—only safe as long as the pressure is low. When the pressure is increased physiologically, through eating, drinking, sexual congress, exercise, or pathologically, through stimulants, the emotions, or by slight injuries to the head, then the aneurismal walls give way and a serious hemorrhage follows.

Without previous disease of the arteries it is almost impossible to think of hemorrhage from rupture to take place. The action of the heart alone is never responsible. In most of these cases where the endarteritis has existed for a long period, the heart is hypertrophied, a condition probably due to the resistance which it has to overcome in forcing the blood along through the diseased and often narrowed vessels without the aid of the normal elasticity by which the work of the heart is much lessened.

To an individual with such a diseased condition of the cerebral arteries, a trauma, be it ever so slight, may, and does very often, produce fatal hemorrhages. When such cases arise in the criminal courts, what is to decide the true guilt of the prisoner? Should the jury listen only to the passionate eloquent summary of the prosecuting attorney, or should the jury take cognizance of the status of the

cerebral vessels of the victim previous to the injury, and heed the testimony of the microscopist, who has carefully examined into the condition of the arteries and found the prisoner, though guilty, but nevertheless, a victim of circumstances?

There is an old story told of a physician who when being asked his age, replied that he was as old as his arteries. How true this is, those of us who feel of arteries can bear testimony, but is it not equally true, that a man is no healthier than his arteries? Here again, those of us who examine applicants for life insurance know full well that no individual with a sclerotic radial or temporal artery will be accepted as a first class physical risk. If a condition of sclerosis exists at the wrist or forehead, it is safe to infer that the same condition will be found at the base of the brain. It has even been asserted by Duret that endarteritis will be found affecting the basilar artery when its presence can be detected in no other artery of the body.

If life insurance companies regard such individuals as sub-standard risks, why should not courts of justice? I do not make this plea because I favor the criminal classes or desire to lighten their punishment in any degree, or to offer any inducement or incentive to future transgressors, but simply to call attention to a question which I believe will in the near future be given full and due consideration.

A chain is no stronger than its weakest link, or a bridge stronger than its weakest span, or a man stronger than his weakest artery.

If a man with such a condition of the arteries be engaged in heated discussion, in mental or physical excitement, or is under the influence of alcoholic drinks, or all combined, and is suddenly stricken down with a fatal hemorrhage, the verdict will simply read, death from apoplexy. If, however, he is engaged in a dispute, under the same conditions as just noted, and receives a slight blow, perhaps even a push by his antagonist, and a fatal hemorrhage likewise ensues, the verdict will read, murder or manslaughter and the prisoner will most generally receive the full punishment allotted by the statute. A case of this kind, in which I was engaged as medical expert, but failed for some reason to appear on the stand, illustrates the injustice of such procedures, and although perhaps not admissible in an address of this kind, nevertheless, I will report it and grant you the exceptions.

The victim was a sailor of Swedish extraction, and had sailed the lakes for seven or eight years, making his home at Buffalo. He was in the habit of spending his nights when on shore at a notorious dance hall in the infected district. One night he met a singer in the

resort, whose husband was "the strong man," doing certain tricks, as stone-breaking, tearing chains asunder and the like. The couple proceeded up-stairs to a private room and drank heavily of strong liquors. Leaving the room and descending the stairs they met the husband who struck the sailor on the jaw, felling him, and in a few moments the latter expired. Post mortem examination of the cranial cavity revealed a large flattened clot of blood in the posterior fossa of the cranium—the same having escaped from a large opening in the basilar artery, near its bifurcation into the posterior cerebrals. The basilar artery was the seat of an arteritis, also endarteritis, with thickening of the lumen in some places and thinning in others. It was at one of the thinned portions where the rupture occurred. Other evidences of cerebral or arterial disease were wanting, and the anatomical diagnosis was reported as "cerebral basilar hemorrhage."

Of course, no history of syphilis could be obtained, but the seat of disease, condition of the artery, occupation, habits and surroundings of the man, leave little doubt as to some previous specific inoculation. No doubt the woman's husband was, to a great degree, a victim of circumstances. With the degenerated condition of the arteries, as was found in the case, the excitement might of itself have produced the arterial rupture, and this, further accentuated by the increased arterial tension, due to the large amount of stimulants which he had taken, would have required but a very slight shock, either mental or physical, to have produced a disruption of the diseased vessel. The force of the blow was of itself not so important under these circumstances, although at the trial much stress was laid on the assumption that the prisoner must have dealt a terrible knock-out blow, being noted for his strength, which, in fact, consisted only in stage tricks, he being actually possessed of only ordinary strength.

There was no examination made microscopically to determine the exact pathological condition of the bloodvessels. Neither was the defense of the prisoner as vigorously fought as might have been on account of the evil atmosphere surrounding the tragedy, and the verdict of the jury read manslaughter in the first degree. Had the microscope been called into this case, the arterial degeneration probably present been thoroughly demonstrated to the court, the defense of the prisoner carried out on lines suggested above, I believe the disposition of the case would have been different, even though it was of unsavory character.

Soon after I was called into another medico-legal case, which, with your kind permission, I will also briefly narrate.

A policeman making his rounds in the lower part of our city came across a group of children surrounding a drunken man, who had fallen to the ground. In trying to rouse him, the man suddenly sprang to his feet and attacked the policeman, so that the latter was obliged to defend himself, and in the fray, struck the drunken man on the head with his club. The man staggered and fell to the ground. An ambulance was called and he was taken to an emergency hospital for treatment. No fracture of the skull was found, and no abrasion of the scalp could be detected, but the patient was in a condition of coma—very light—which increased gradually to a deep coma. A meningitis was supposed to be the cause of the coma and after an illness of two weeks he died. The autopsy, made very carefully, did not reveal any meningeal inflammation, but on careful inspection a small aneurism with hemorrhage into the medulla was detected. The brain and arteries were carefully hardened and prepared for microscopical examination, which was conducted by Dr. H. U. Williams, of Buffalo, representing the prosecution, and by myself for the defense. No trace of any injury to the meninges could be found. The brain matter was healthy; not so, however, the arteries. A general endarteritis was found affecting nearly all the cerebral arteries, but more especially the vessels at the base of the brain—the vertebrals and the basilar. The middle coat of the vessels were unequally thickened and thinned and a small aneurism had developed near the junction of the basilar and vertebral arteries. This aneurism was furthermore ruptured and the pressure of the escaped blood upon the vital centers in the medulla occasioned the man's death.

At the trial, the medico-legal question of most import was in how far did the blow of the policeman's club produce death? Had the arteries been in a normal healthy condition there would have been no contest over the case, no point of difference to be settled. The condition of the vessel walls, however, put another aspect to the case. Who could say but what the excitement and the consequent increased arterial pressure might not of itself have produced a rupture of the diseased vessels. The microscope proved conclusively a dangerous condition of the ruptured vessel and case after case has been found of a similar death without any external violence. It was therefore impossible to state what brought about the rupture and the jury wisely exonerated the policeman from the charge brought against him.

Diseased conditions of the cerebral arteries, especially produced by alcohol and syphilis—place individuals into a class peculiarly of

their own. They are dangerous to themselves and far more dangerous to others. They offer a point of least resistance, and upon the degree of resistance does their own life and safety depend. They are no stronger, no healthier than their diseased vessels and should be so regarded in all courts of justice.

A trauma not severe enough to produce any pain or injury to a normal healthy man will produce brain lesions of the most dangerous character in these cases. Where the condition of the arteries is not made manifest to the court by a microscopist or where the court fails or refuses to see the susceptibility of the patient to apoplexy through slight injuries, then the prisoner receives punishment far in excess of what he really deserves. All cases of death following head injuries should be most carefully investigated and the true condition of affairs be made known in no uncertain manner. The microscopist becomes in all such cases a most important adjunct and his findings and deductions should be given most careful and respectful consideration.

Turning now to another class of symptoms engendered by trauma to the head, we meet disturbances of mental action, sometimes slight, sometimes profound and not in a few cases of beginning degenerative lesions, terminating in insanity. It is not so much the local effect of the injury, but the general effect of a *commotio cerebri*, and the syndrome of mental disorders induced by such cause has been well termed by the Germans "commotion insanity." The effect of a violent blow or jar, or jolt to the head must have some influence upon the molecules of the brain, as well as upon the encephalon as a mass; it must displace and disarrange delicate microscopic structures, such as the nerve cells and nerve fibers.

If there be present in the individual the remnant of previous syphilitic inoculation, the effect will be far reaching and most serious. A slumbering paresis is many times awakened by slight accident so infinitesimal that at the time no heed is paid to it. Slowly and surely the progressive symptoms of paresis develop and soon the disease is converted into a galloping paresis, and fortunately for the patient and friends a rapid dissolution is to be looked for. The microscope again discloses the cause, as Mickle, of London; Mendel, of Berlin, and many others have long since shown, a degenerative condition of the frontal lobes with a previous syphilitic inoculation as a background.

General paresis, like tabes, has an initial stage that may last for months or years during which the patient is not only not incapacitated

for work, but may conduct himself so rationally that no suspicion is entertained that he is already suffering from a disease which is soon to destroy both body and mind. From the insidiousness of its onset it is usually impossible to say even approximately when the morbid process began. In nontraumatic cases, where the first marked symptoms consist of an attack of acute maniacal excitement, or of acute mental depression, there is every reason to suppose that the disease had already existed, though unsuspected, for sometime. Similarly, when an injury to the head is quickly followed by an outbreak of the symptoms of the disease, it is never possible to say with absolute certainty that the traumatism did anything more than hasten into activity a process which was already existent and whose ultimate development was inevitable, irrespective of traumatic agency. (Bailey.)

This early prodromal stage, when the individual is thought by friends and relatives to be perfectly sound and healthy, is called by LeGrand du Saulle the "medico-legal period," because of the large number of medico-legal inquiries made bearing upon the patient's soundness of body and mind during this period. I recall a case where in such a predisposed individual paretic symptoms rapidly developed after having been knocked down on a street corner by a careless driver. Previous to this accident he was a thorough musician and an adept violinist. After a few days he became a paretic of the most pronounced type with his delusions of grandeur all concentrated about music, opera and song. The family, on advice of the consulting attorney had recourse to law and a suit of damages was the result. Trauma was looked upon as the cause of this man's insanity, but as a matter of fact it was only contributory. The real cause was the pathological condition existing in the poor fellow's brain—a product of his own misdeeds. The trauma only lit up the slumbering embers and once flared-up the progress of the disease was not to be controlled.

The percentage of cases of paresis, due to trauma is given by Schlager¹ as "one-seventh of all cases of mental diseases induced by head injuries." Meyer found 15 cases of injury to the head in 76 cases of general paresis in which the causes were clearly made out. In 80 male cases Krafft-Ebing found cranial injury to be the cause in 6. Christian observed 43 cases of general paresis in 100 cases of injuries to the skull. Other observers as Mickle and Gudden, have found a relationship between trauma and general paresis in 7-10 per cent. of their cases.

1. Quoted from Bailey; Accident and injury.

In the great majority of these cases the head injury is but secondary to the predispositions underlying the individual. These may be either inherited or acquired. If the former, then a congenital syphilis; if the latter, a preceding syphilitic inoculation are, as a rule, the predisposing factors. Generally, and if the courts are ill-advised and ignorant of the underlying condition, punishment usually in the shape of heavy damages are awarded the patient.

The rôle which the diseased bloodvessels play in paresis is perhaps primary, leading to the atrophic changes in the brain cortex itself. The very earliest anomalies are nutritive defects in the ganglionic cortical elements, and then follow local hyperemias of the frontal, temporal or parietal convolutions, dilatation and degeneration of the coats of vessels, lymphatic stasis and effusions into perivascular lymph spaces, swelling and then wasting of nerve cells and fibers, proliferation of neuroglia and of protoplasmic glia cells, cortical and meningeal adhesions and the formation of neo-membranes.

Thus it will be seen that although differing materially from the pathological condition of the arteries, as found in apoplectic attacks, nevertheless, the degenerative coats of the artery, through syphilitic infection, are equally as dangerous to the victim and as calamitous to the aggressor.

Alcohol and syphilis, the two vices of civilisation, produce the most degenerating conditions in the neuron and in the vessels going to support and tone the system of neurons. Death and disease follow closely upon their trail; they single out with great delight both youth and beauty; they render the strong and vigorous weak and susceptible; they disintegrate and destroy the physical, as well as the psychical; but more than all, not satisfied with their own unfortunate prey, they tend to inculcate others by force of circumstances and weave a web of guilt and suspicion about them. Fortunately, however, in many cases they leave such glaring earmarks that the microscope is able to detect their presence and act thereby as a safeguard to the unsuspecting and innocent.

371 DELAWARE AVENUE.

THE following, says the *Medical Record*, is more or less good advice for doctors: "Drink less, breathe more; eat less, chew more; ride less, walk more; clothe less, bathe more; worry less, work more; waste less, give more; write less, read more; preach less, practice more."

EDEMA.

By STEPHEN Y. HOWELL, A. M., M. D., M. R. C. S., Eng.

Buffalo, N. Y.

C ONTEMPLATION of the structural details of the human body, nature's apparent *chef-d'œuvre*, must be attended with wonderment that the frail machine should, in any case, survive the manifold dangers which threaten its existence, that it should fulfil the expectations of its creator. His minute morphology shows man to be a multicellular animal with stromal supports of various textures and designs, so combined and endowed as to perform with certainty the manifold functions which are essential to his well-being and which enable him to work out his destiny.

These myriads of component cells, massed in collaborating organs, the latter each with special functional endowments, are most marvelously and wisely provided for. To furnish the frail little workers with the vital energy which shall enable them to perform their allotted tasks, provision is made for their food-supply, for their growth, multiplication and decay, for the removal of their waste, and, finally, in the case of the glandular organs, for the further use in the economy, or the final expulsion therefrom, of their special products, in the form of secretions and excretions.

To properly realise the feasibility of this close attention to the wants of the individual cell it is only necessary to remember that the so-called solid tissues are solid in name only. Even the bones, to which the above epithet is most fittingly applied, are fairly riddled with channels, from the large Haversian canals to the microscopic canaliculi, through which access is afforded to each individual cell, snugly ensconced within its stromal investiture.

In like manner the cells of the softer tissues are everywhere accessible through the medium of branching and inoculating ways, varying in size from those readily appreciable to the naked eye down to the delicate plexiform network of clefts or spaces which are in immediate contact with the cells and are only in part supplied with a delicate endothelial lining. Thus it is that provision is made for the cell-wants through this elaborate system of approaches, in which flow the fluid tissues, the blood and lymph. When food has been converted by the digestive processes into materials capable of assimilation by the cells, these nutritive compounds are transferred to the blood through the veins and lacteals. From this blood there normally exudes, through the walls of the small veins and capillaries, a fluid rich in dissolved or suspended food-stuffs, termed lymph,

which enters the lymphatic capillaries and is by them conveyed to the cells. Thus carbohydrates, fat, albumin, oxygen, salines and water compose the elaborate bill-of-fare presented to the ultimate workers of the body; while the excretory organs discharge urea and other proteids, carbonic acid and water. It will be remarked that these excreta are simpler compounds, chemically speaking, than the ingesta, the difference in the heat values of the two being appropriated by the tissues and stored up as potential energy or force, to be converted into kinetic energy as occasion may demand. The special products of the cells are conveyed away through secretory ducts, while the diverse excreta are deposited in the surrounding plasma stream to be returned to the blood indirectly through the lymph ducts, or directly by endosmosis. Normally, then, the tissues are constantly traversed by tiny streams of fluid, exuding from the bloodvessels to be again gathered up by the lymph-drains.

Associated with the lymphatic vessels, and a part of the same system, are the serous cavities of the body, which are in reality enormous sacs, whose surfaces are in communication with the lymph-drains through the medium of minute intercellular stomata. Thus the peritoneal cavity, pleura, pericardium, tunica vaginalis testis, joint cavities, ventricles and subarachnoid space, aqueous chambers of the eye and the aural labyrinths are all supplied with lymph in quantities suitable for the proper fulfillment of their various functions, any excess being promptly drained off. When for any reason, however, the fluid transudations from the bloodvessels are excessive and the drainage system proves inadequate to cope with the supply, the tissues become saturated to a pathological degree and fluid accumulates in the body-cavities. To describe such a condition the terms "dropsy," "hydrops" or "general dropsy" are employed, meaning, to repeat, an accumulation of fluid transudate from the bloodvessels in the interstices of the connective tissue, in the serous cavities of the body, or in both. When the dropsical effusions are limited to the skin and subcutaneous tissue and are extensive in area the condition is known as "anasarca;" while edema describes a dropsical condition of the integumentary structures limited in area or confined to the connective tissue of organs.

Thus we speak of edema or a dropsical condition of the eyelids or ankle, not anasarca of these structures; of edema of the lungs, liver, kidney and similar states.

Other local or regional dropsies are known as "ascites," an effusion limited to the peritoneal cavity; "hydrothorax," to the

pleural spaces; "hydropericardium," to the pericardial sac. By "hydrocephalus," internal and external, we mean dropsy of the ventricles or subarachnoid and subdural spaces respectively; by "hydrocele," dropsy of the peritoneal extension which persists as the tunica vaginalis testis, and the like.

The fluid in dropsical conditions is always derived from the blood-vessels, but varies greatly in composition. As a rule, it is of lower specific gravity than the blood plasma or liquor sanguinis, contains less albumin, and has a slight tendency to coagulate, because of its comparative poverty in the fibrin-factors.

The effusions which characterise edema and anasarca are usually the most watery, while those which accumulate in the pleura, peritoneum and tunica vaginalis are rich in albumin. As we shall see, however, in certain conditions the pure blood itself seems to leave the vessels.

Causes.—The various pathological conditions resulting in edema may be classified in four groups: (1) the edema of engorgement; (2) inflammatory edema; (3) the hydremic variety, and (4) the angio-neurotic of Jacob.

Under the first head may be arranged all those causes resulting in obstruction to the return circulation in the veins and capillaries, such as obtain in mechanical, venous, passive, or obstructive hyperemia; in cases of feeble cardiac impulsion or diminished vis-a-tergo and in lymphatic obstruction. Because of the free anastomoses of the venous system, the obstruction of a single vein is unlikely to cause local dropsy, the probability of this event being in inverse proportion to the existing collateral circulation. Gravity, too, is a factor of which sight must not be lost. Its effects are most apparent in the lower extremities, when the patient stands or walks, whereby the pressure upon the ill-nourished veins and capillaries is greatly increased and leakage is favored. Familiar examples of this are met with in ambulatory cases of hydremia or cardiac disease, in whom swelling of the legs is observed during the day, only to abate at night when the recumbent position is assumed.

If a single lymph duct be obstructed the area drained by it may become edematous when collateral lymphatics or veins fail to assume its burden. Should the thoracic duct itself be alone involved general dropsy does not necessarily ensue, though ascites or hydrothorax may result. When its obstruction is associated with tricuspid insufficiency, however, general serous exudation is greatly favored.

Examples of obstruction to the return circulation are very frequently met with by the physician. A moderately tight finger-ring, for instance, which does not materially impede the arterial supply but checks the venous and lymphatic outflow, is the cause of edema of the constricted member. If not removed the added pressure of the effused serum may cut off the arterial supply entirely, when gangrene will ensue. Interference with the portal circulation in consequence of hepatic cirrhosis or the pressure of a carcinoma favors ascites. Pulmonary congestion, the result of mitral disease, is attended with edema of the lungs. Obstruction to the systemic circulation wrought by tricuspid lesions, the latter either primary, or secondary to mitral defects; pressure upon the iliac veins by the gravid uterus; the venous thrombosis resulting in milk-leg; diminished muscular contractions in the invalid or bed-ridden patient; valvular incompetence in the veins of the extremities, which results from dilatation; lessened thoracic aspiration in pleural disease, or the increased obstructive pressure within the thorax induced by the playing of wind instruments, all—have a causal influence. The *vis-a-tergo*, or driving force of the circulation, the diminution of which is attended with venous hyperemia and edema, is especially effected in chronic exhausting diseases, in the acute fevers such as typhoid, in degenerative changes resulting in dilatation, and the like, all of which lessen the motor power of the heart and tend to cause its failure. The driving power of individual arteries likewise may be lessened by direct obstructions from without, or by reason of changes in the walls, wrought by the fatty, atheromatous or fibroid degenerations.

Results.—The ultimate result of the hyperemia induced by these various causes is impaired vascular nutrition. The walls of the veins and capillaries suffer from interference with their food-supply, and the degree of the consequential effects varies directly with the extent of said nutritive interference and with the intravascular pressure.

INFLAMMATORY EDEMA.

For our present knowledge regarding the phenomena of inflammation we are largely indebted to the elaborate and extended experiments of Cohnheim and his school. The whole subject is one of vital import and pregnant with interest, but I shall not weary you with a close résumé of the various steps by which these observers were led to their final conclusions. Let it suffice if I simply recall those points which pertain more immediately to the subject under

discussion. If we watch the exposed mesentery of a frog, for example, the first step in the process of inflammation is noticed in the dilatation of the arteries, followed by the enlargement of the veins and capillaries. At first and for a short space of time, this increase of lumen area is attended with a greater rapidity of the blood-currents, but soon the fact that the blood courses more and more slowly through the dilated vessels becomes very noticeable. Finally, the primal causes persisting, all onward blood movement in the capillaries ceases, the mass merely swaying to and fro rhythmically with the pulse—the so-called stage of oscillation. Succeeding this is a complete stasis of the stream, resulting in the death of the capillary walls whose food supply has thus been cut off, when thrombosis finally ensues. In all these cases of denutrition of the vascular endothelia, where death has not resulted from their lengthened fast, the vitality of the vessel-wall is restored by again feeding the cells; that is, by reëstablishing the blood stream in the affected vessels. The cure results from the *vis medicatrix naturæ*.

Early in the course of these vascular and circulatory changes the inflamed area will be seen to swell. The normal fluid transudate increases greatly in quantity, while its quality is likewise altered. The lymphatics being unable to drain off the swelling flood which permeates the tissues, it accumulates in the lymph spaces. Following quickly in the wake of the fluid are seen new cells; and should a small vein or a capillary in the inflamed region be watched, the escape or diapedesis of leucocytes through their walls will explain the genesis of the new arrivals. Later, and in proportion to the tissue-insult and vascularity, the red blood corpuscles will be observed to pass out of the capillaries as the blood-stream slows, both white and red cells being wafted farther into the tissues by the serous streams which accompany them. If the fluid transudate of inflammation be compared with that which exudes from the vessels in venous hyperemia an excess of albumin, phosphates and carbonates will be found in the former, together with an increased disposition to coagulate; that is, the resemblance to the liquor sanguinis becomes closer. As the inflammatory process increases in severity the escaping fluid resembles the blood itself more and more, till the two become finally identical in composition.

To understand the real *raison d'être* of these observed phenomena in hyperemia and inflammation was long the great desideratum of the professional world. The paramount importance of such knowledge was universally felt, since it would throw a flood

of light into many of the dark places which the persistent efforts of the physiologist and pathologist had failed to illumine.

Aided by an efficient staff of able collaborators, and stimulated by his rediscovery of cell-migration from the bloodvessels in 1867, Cohnheim, after the long and arduous labors involved in innumerable experiments and deep thought, subsequently announced the theory which now meets with well-nigh universal acceptance. The essential lesion was declared to be a "molecular change" in the vessel wall, possibly chemical in character, since no alteration of structure could be detected. Whether the endothelial lining-cells of the vessels, the intercellular cement-substance or both were the structures involved in this change could not be definitely determined. Resulting from an injury, direct or indirect, which tended to devitalise the morphological constituents of the bloodvessels, this molecular change altered the porosity of the vessel walls and permitted the escape—first, of fluid of changing qualities, and, later, of blood-cells. Cohnheim likened this process to one of filtration, embodying his views in the pithy statement that "change of filter means change of filtrate."

HYDREMIC, CACHECTIC OR UREMIC EDEMA.

Qualitative variations in the blood, resulting in its impoverishment, and which are properly comprised under the term spanemia, play a large part in the production of dropsy. Hydremia due to an actual (hydremic plethora) or relative excess of water in the blood and the toxemias resulting in malnutrition and nerve irritation have all a causal influence. Instances of these blood-conditions are seen in renal disease, anemia, chlorosis, malarial cachexia, scurvy, slow starvation, loss of blood, suppuration, chronic discharges, continued fever, growth of neoplasms, prolonged lactation and all debilitating conditions resulting in hydremia.

Cachectic edema frequently occurs in feeble and poorly nourished individuals; and one of the commonest forms of dropsy is the slight edema of the legs in anemic persons whose heart and lungs are free from apparent disease. This may be attributed to various factors: hydremia, blood pressure, lessened nutrition of vessels, and, perhaps a tendency to vasomotor paresis.

Fourth, the influence of the nervous system in the production of dropsy must not be lost sight of, the so-called angioneurotic class of Jacob.

Paralysis of the vasomotor fibers, either central or peripheral, or stimulation of the vasodilator nerves, may result in hyperemia with transudation and ecchymoses in the areas affected, as the lungs, brain, pleura, intestines and kidneys. Serous apoplexy may thus be accounted for.

In paralysis the affected limbs sometimes become edematous, especially in anterior poliomyelitis or infantile palsy. Edema of the face may occur in affections of the trifacial or 5th nerve. The irregular and anomalous distributions of the fluid transudates, in general dropsies may be due to the local disturbances of innervation.

Gross Appearances.—The recognition of dropsical conditions is easy, as a rule. When the integumentary structures are involved the parts are swollen, particularly in situations where the subcutaneous connective tissue is abundant and lax, as in the eyelids, penis and scrotum. The skin-folds are apt to be obliterated, and stretching may be sufficiently marked to occasion the dermal cicatrices such as commonly follow pregnancy. The parts are slightly translucent, doughy to the touch and retain the impress of the fingertip when pressure is made for a time, "pitting," as it is called. The color is pale, as a rule, in renal dropsy; while in heart disease the edematous lips, skin and mucous membranes may be dusky or cyanosed.

When edematous parts are incised, the tissues are seen to be thickened, jelly-like and translucent, or watery; while pressure extrudes a serous fluid which is abundant in lax connective tissues and loosely constructed organs like the lungs, but comparatively scanty in denser viscera, such as the kidney.

Microscopically, the dropsical part is found to be made up of a delicate reticulum of connective tissue, the spaces of which are filled with fluid and lined with flat endothelial cells, as a rule. When the large body cavities are involved the sensation of fluctuation on tapping with the fingers is readily elicited, particularly in ascites. Percussion and exploratory aspiration are further diagnostic aids which rarely fail us.

The differential diagnosis between the cardiac, renal and anemic forms of general dropsy is rarely attended with any great difficulty; but in those advanced cases where all three forms coexist it is often impossible to determine their precise order of sequence. Cardiac dropsy generally first shows itself in the feet and ankles; there is often a history of previous articular rheumatism in the case

of young people, and physical exploration discloses heart trouble. In the renal variety we are aided by the urinary examination, this usually enlightening us not only as to the existence of kidney disease, but also disclosing its more precise nature; the edema first affects the eyelids in the majority of cases, while the external genitals are involved earlier and more frequently than in cardiac disease. It should be remembered, however, that the earliest observed symptoms may be convulsions and coma.

In hydremic or anemic dropsy the spanemia is easily determined by blood-counts and by the percentage of hemoglobin, in the absence of cardiac or renal lesions. The effusion, too, is not extensive, and is limited to the integumentary structures, generally of the face and ankles. Oftentimes the face is swollen in the morning, the feet in the evening.

Prognosis.—We are not to lose sight of the fact that dropsy is not a disease *per se*; and whether it be temporary or lasting, whether it merely contributes to the patient's discomfort or hastens his taking-off depends rather on the nature of the primal disease of which it is merely a symptom. Remove the cause and we cure the dropsy. In renal and cardiac disease, for example, large dropsical effusions are of evil omen since they herald the breaking-down of the patient's conservative forces and proclaim a waning vitality. On the other hand, in scarlatinal anasarca, the edema of pregnancy and similar acute forms, the outlook is favorable, as it is likewise in the nonpernicious forms of anemia.

Treatment.—The various remedial measures to be adopted may be conveniently arranged under three heads: (1) Efforts to remove the fluid accumulations. This may be accomplished by puncturing the affected tissues with round needles, by incisions in the most dependent parts, and by the use of the trocar or aspirator. Indirectly, their absorption is favored by measures which promote diaphoresis, by the use of diuretics and hydragogue cathartics. (2) The removal of all obstructions to the circulation in bloodvessels and lymphatics is indicated, whenever this is possible. (3) General measures should be adopted which will tend to restore and maintain the patient's strength and enhance the nutrition of his tissues. We can relieve pain, support the swollen parts with suitable bandages, see that proper clothing is worn, look after the diet, and exhibit such tonics as are indicated.

Clinical Report.

PARTIAL ATRESIA OF THE URETHRA.

By W. H. HEATH, M. D., Buffalo, N. Y.,

Clinical professor genito-urinary diseases, Medical Department, University of Buffalo,
surgeon genito-urinary department, Erie County Hospital, etc.

W. N., EIGHTEEN hours after birth, May 11, 1899, the nurse in attendance reported that although the child's bowels had acted freely, it had passed no urine, and that the infant was irritable, crying almost incessantly as though in pain and suffering. Examination showed the diminutive penis to be semi-erect, rather swollen and tender on manipulation; a prepuce very elongated with aperture and passage through it so small and tortuous as not to admit the smallest pocket-case probe.

A circumcision was at once made, which on completion revealed further a rudimentary pin-hole meatus with an imperforate urethra, forming a cul-de-sac about half inch in depth, evidently due to an agglutination of the walls of the urethra. The meatus was carefully incised and the urethral obstruction forced with a delicate, sharp pointed tenotome and dilated with thin bladed forceps. This accomplished, it was fully expected that a flow of urine would ensue as the bladder was so distended as to be evident through the abdominal walls, while the urethra, under the scrotum, was distinctly bulging. Urine not appearing, a catheter was passed, which determined that a second obstruction existed at about the peno-scrotal juncture. This was carefully subjected to the same procedure, when a gush of urine followed. Since that time micturition has been normal and uneventful. The first urethral obstruction was apparently one quarter of an inch in depth, quite fibrous and resisting; the deeper one less so in character. No deleterious effect upon the health of the child was noticeable nor have the urinary organs themselves apparently suffered.

The interesting features of the case are that it is one of rarity and that the urinary organs did not suffer, so far as can be determined by their subsequent action. This may be taken that the condition was recent and indicated the cause as pathological, rather than a malformation. Further, that the procedures were successful. Successfully cutting through an obstruction in tissues so delicate and anatomically difficult by diminutive size, etc., without the aid of sight, with no misadventure, perforation of urethra, etc., is good fortune. Concerning urination by the fetus in utero, there is yet some question. That the function is performed and is essential, though irregularly performed, is evinced by the chemical character of amniotic fluid and the disturbances noted in a few recorded cases of

complete atresia. In these cases dilatation of everything back of the point of obstruction follows and has been noted to such an extent as to be an impediment to delivery.

Its cause is not clear. It may be a vice of development, but is most likely pathological. An extremely acid or irritative urine with susceptibility of tissue readily causes irritation, inflammation and with the new delicate fetal mucous membrane added adhesions of opposite surface would be a rational explanation.

The possibility of suppression and mechanical obstruction being easily confounded in infants justifies that in all cases of delayed urination that a soft rubber catheter be passed at once to determine this point, as congenital malformation and obstruction are more likely than suppression, which is pathologically rare in an infant.

As to how long nonurination in an infant should be permitted, it can be summed up by saying it should not be tolerated at all. If when the bowels act the bladder is not emptied its delay and cause should be accounted for at once and treatment instituted.

131 FRANKLIN STREET.

In view of the question raised by Dr. Heath in the above article, the following editorial from the *New York Medical Journal* of September, will be of interest.—[ED.]

THE LIQUOR AMNII AND THE FETAL KIDNEYS.

It has long been a matter of discussion as to whether or not the kidneys of the fetus were functionally active, and consequently, as to whether or not the liquor amnii consisted in great part of the urine of the fetus. To settle the question, Schaller (*Archiv. für Gynäkologie*, lvii, 3; *Deutsche Medizinisch-Zeitung*, April 24th,) has resorted to a most ingenious method of investigation—namely, that of administering phlorrhizin to pregnant women. Phlorrhizin, a constituent of the root bark of various fruit trees, has been known for years to have the property of causing glycosuria when ingested. Schaller's plan was to ascertain if the liquor amnii contained sugar in considerable amount after the administration of phlorrhizin to the mother. If he found none, he would conclude that the *fetus in utero* did not urinate; if he found only a small amount, he would infer that the functional activity of the fetal kidneys was displayed only during the late period of intrauterine life; if he found it in abundance, he would agree with Gusserow and his followers that the liquor amnii was largely composed of fetal urine. All this was founded on the assumption that phlorrhizin administered to the mother would pass into the fetal circulation and be carried to the fetal kidneys, and it is in the kidneys that the sugar of phlorrhizin glycosuria is wholly or for the most part formed.

Schaller concludes that there are no regular secretion and periodical excretion of urine by the fetus, even at the very end of pregnancy; that the functional activity of the fetal kidneys does not begin until the process of parturition induces changes in the placental circulation, and that even during labor the fetus does not generally urinate into the liquor amnii; that it is only very exceptionally that the fetal bladder is emptied into the liquor amnii, and then most probably in consequence of disturbances of the fetal circulation; that the liquor amnii is a transudation from the maternal vessels; and that the kidneys of the newborn child perform their function more slowly than those of the adult. These observations seem to settle the question of the relationship of the liquor amnii to the urine of the fetus.

Progress in Medical Science.

SURGERY.

CONDUCTED BY JOHN PARMENTER, M. D., Buffalo, N. Y.

Professor of anatomy and adjunct professor of clinical surgery, Buffalo University Medical College.

AND

NELSON W. WILSON, M. D., Buffalo, N. Y.

AN INTERESTING BIT OF SURGERY.

ILLUSTRATING an interesting bit of surgical work, the *Lancet* recently reported that Dr. Abbott-Anderson treated a cook who, while sharpening a knife had cut off the tip of his nose. The patient came to the office without the fragment and a boy was sent to look for it. He returned with the piece which was "a thin strip an inch long and half an inch broad at its lower end." This piece was thoroughly washed in warm boric acid solution and stitched into place with fine black silk. It had been severed about half an hour. For four hours after the suturing the nose was kept covered with compresses wrung out in hot boric acid solution, and was then put up with a thick dressing. The wound healed by first intention.

THE CAUSE OF DEATH BY BURNS.

AT VARIOUS times many theories regarding the cause of death by burns have been advanced. All have been more or less carefully investigated. Azzarello (*Giorn. Mal. delle Mal. Ven. e della Pelle*) reports the results of his very complete work in this direction. The

theories worked on were the four most prominent: (1) Shock of extreme pain; (2) thrombosis, embolism, or destruction of red blood corpuscles; (3) pyemic infection from the burned surface; (4) poison formed by the action of heat on the tissues, or auto-intoxication from defective elimination by the skin.

Azzarello's investigations show the correctness of the intoxication theory. He eliminated shock by the administration of chloroform and by section of the nerves supplying the burned part. An animal which had been chloroformed died in the same time and with the same symptoms as one unanesthetised. Not the slightest difference was made by section of the nerves, and death came so rapidly that there was no time for bacterial infection. After death from burns, there was not found any destruction of red corpuscles, there was no embolism, nor any thrombosis. Following out the intoxication theory, Azzarello used the blood from animals which had been burned, and extracts of burned tissues, for injection into the healthy animals, which died with all the symptoms exhibited by those which had been burned. Injections of large quantities of artificial serum, seemed to save life in many instances.

CELLULOID SUTURES AND LIGATURES.

PAGENSTECHER (*Deut. Med. Woch.*) takes a good thread, boils for half an hour in a 1 per cent. solution of soda, washes in boiling water, and dries between sterile compresses. It is then soaked in a solution of celluloid, and passed again through the same solution. Afterward it is sterilised by steam under pressure, and preserved for use either dry or in an alcoholic solution of bichloride of mercury. The threads have a smooth surface, never tangle, cannot absorb secretions, and are easily tied. Pagenstecher uses these celluloid threads to the exclusion of silk, and the use of catgut for ligatures has been greatly reduced. The results have been good and the saving considerable.

A HORSEHAIR SCRUBBER.

FORBES (*Phil. Med. Jour.*) has gone to the printing office and applied to surgical use an article of the printer's toilet, which is so old that its origin is lost in the mazes of time. From time immemorial printers when they washed up have used what they called the "rat," which is nothing but a bunch of horsehair. This has cleansed countless of printers' ink and the grime of type metal. In fact, it is the only thing which will do the work.

Forbes uses a "rat" instead of a brush in cleansing the hands and preparing the operative field, and he has found a valuable use for it. The "rat" is stiff enough to scrape away dirt, but it will not injure the most delicate skin. One beauty of the "rat" is that it can be sterilised and is practically indestructible.

NEW WAY OF CLOSING THE PERITONEUM.

O'HARA (*British Med. Jour.*) gives this method of treatment of peritoneal opening: The incision through the peritoneum is never made more than four or five inches in length. If additional room is required the opening is stretched. As the membrane is very elastic it readily lends itself to this procedure. When the operation is over, a purse-string suture of kangaroo tendon is passed completely around the opening in the peritoneum, beginning at the middle of the incision. When this is drawn up and tied the peritoneal cavity is perfectly closed against leakage from without, and there is no raw surface within to form adhesions to the intestinal coils. The suture is easily applied, and the peritoneum is in a far better condition to withstand any post-operative vomiting than after the ordinary suture. The remaining layers of the abdominal wall are closed by interrupted sutures. He has never seen any bad results follow this method of closure.

EPILEPSY OPERATIONS A FAILURE.

AMAT (*Bull. Gen. de Ther.*) gives a very interesting review of cases and records of resection of the cervical sympathetic for the cure of epilepsy, which shows the operation is most unsatisfactory. In many cases the cutting has been followed by an increase in the number of seizures. There was trophic disturbances in some patients a considerable time afterward. Amat advises against operation.

AN INTERESTING SURGICAL CASE.

BALTON (*Medical News*) reports an interesting surgical case. The patient was shot, the ball entering the abdomen, just to the right of the median line and about two and one-half inches below the tip of the ensiform cartilage. There was a considerable degree of shock, but no further symptoms significant of intestinal injury or injury of the lung. Temperature 100° F., respiration 26, pulse 106. On opening the peritoneal cavity the anterior surface of the left lobe of the liver presented a horizontal laceration two and one-half inches

in length and one inch in depth, from which fairly active bleeding was going on. There was a considerable amount of free blood in the peritoneal cavity. Digital exploration of the liver wound failed to disclose the path of the bullet, and it was tightly packed with gauze, which easily checked the hemorrhage from it. On the sixth day the patient himself discovered the bullet beneath the skin overlying the sixth intercostal space in the right axillary line, and a small incision served to remove it from this position. The right pleural cavity contained some bloody fluid which was removed by aspiration and the patient made an excellent recovery.

There are two points of interest here : First, a wound of the lung without hemoptysis, and the apparent ease with which liver hemorrhage was arrested by packing with gauze. Balton suggests, inferentially, that gauze crowded into liver wounds and tight bandaging of the abdomen and lower ribs and enforcing costal breathing, to prevent dislodgment of the packing by diaphragmatic movements, is the proper procedure.

ABSOLUTE REST FOR GUN-SHOT WOUNDS.

LUCAS-CHAMPIONNIERE, at the May meeting of the French Academy of Medicine, showed a man who two months previously had been shot in the chest. The only treatment accorded him was enforced rest and cleansing of the external wound. There was marked collapse and considerable expectoration of blood. Absolute rest is demanded in such cases. The patient should not be turned over for auscultation. The position should be horizontal; he may be slightly inclined if respiration is facilitated thereby. Morphine should be used for restlessness, laxatives as a general course, and if necessary stimulants should be resorted to.

HYDATID CYSTS OF THE LIVER.

DIEULAFOY reports to the French Academy of Medicine two permanent cures of hydatid cysts of the liver. The first was by laparotomy and extirpation; the second, in a child, was by aspiration of the contents of the cyst.

Puncture is suitable only in recent cases. Great care should be exercised to prevent the escape of fluid into the peritoneal cavity. A fine needle should be used and the entire contents of the cyst drawn off at the first puncture. In the event of the needle clogging before all the fluid is withdrawn, introduce a second and then withdraw both at once.

SIEUR reports to the Surgical Society of France that he resected the ununited ends of a clavicle and sutured with two threads of strong silk. The fracture was of eight months' standing and separated the outer third from the inner two-thirds. The arm was fixed for a month. In sixteen months all traces of fracture had disappeared and the arm's function was perfect.

THE TREATMENT OF HEMORRHOIDS.

AN INTERESTING discussion of the treatment of hemorrhoids occupied a recent meeting of French surgeons, and the sentiments of eminent men showed a wide difference of opinion. The *Medical News* gives the following condensation of the discussion :

Monod, operating under chloroform, does not touch the external hemorrhoids and cuts off the internal ones, one at a time, with scissors, suturing immediately the cut mucous edges of each. A drain, wrapped with iodoform gauze, is left in the anus.

Reclus uses cocaine and thinks it important to remove the external as well as the internal hemorrhoids.

Pozzi said that it is advisable to respect, as much as possible, the mucous membrane. He, therefore, employs only ignipuncture in the treatment of hemorrhoids.

Tillaux also uses the thermocautery in the same manner. He said that its only inconvenience is the pain which lasts sometimes for two or three days after its use.

Quenu advocated general anesthesia in order to keep the rectum of the patient still. Under cocain it is drawn up involuntarily, even though no pain be felt. He said that different operations were indicated in different cases. If hemorrhoids are particularly turgid, ignipuncture is a better treatment than excision. Prolapse of the mucous membrane is a common complication which cannot be cured by the cautery nor by partial excision. Ignipuncture gives eschars, which do not come away for twelve or fifteen days, and its one advantage is in the economy of blood. The sole objection to Whitehead's operation is the difficulty in carrying it out properly; but that will disappear if the surgeon will accustom himself to its details. It is not followed by pain, and cicatrization is complete in two weeks. He had never seen any contractions follow this operation.

Routier said that there would be no danger of retraction if the line of junction of mucous membrane and skin was respected. His plan is to ligate each hemorrhoid at its base, and then remove the projecting portion with a thermocautery.

SUTURE OF THE AXILLARY ARTERY.

RICARD, of Paris, in removing the axillary glands, accidentally incised the axillary artery. He applied a lateral suture of catgut at four places. The result was perfect, there being no difference in the radial pulse of the two arms.

This report brought from Tuffier the statement that in experimenting on animals, suture of an artery was usually followed by callous which so compressed the artery as to make it impervious. Brazy considered suturing of the axillary unnecessary as he had resected five inches of the artery with no ill-effects.

INDICATIONS FOR OPERATION IN CHOLELITHIASIS.

NAUNYN (*Centralbl. f. Chir.*) affirms that cholelithiasis is not so grave as hospital practice leads one to think. A favorable issue results in the majority of cases without surgical interference. Stones as large as a cherry can pass the common duct, and in many cases a fistula forms between the common duct and the duodenum, and then still larger stones may pass. Indication for operation are given as follows:

1. It is not justifiable to advocate operation in every case as soon as a diagnosis of cholelithiasis has been established, for operative interference does not guarantee a permanent cure, since stones may be left behind, or others form.
 2. Cases of acute cholecystitis with a greatly distended gall-bladder, as well as chronic cases of hydrops of the gall-bladder should be submitted to operation.
 3. In cases of chronic recurrent cholelithiasis.
 4. In cases of obstructive jaundice operation should not be resorted to until a thorough Carlsbad treatment has failed.
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A POINT IN INTESTINAL SUTURE.

FRAZER (*Lancet*) suggests a simple method to insure accurate union along the mesenteric line, in suture of the small intestine. He rotates the two ends of bowel for a slight distance in opposite directions, so that there may be room for two or three stitches between the cut ends of the mesentery. This insures that there shall be no place in the suture line where there shall not be at least one serous surface involved in the suture. The procedure can be carried out with any end-to-end anastomosis.

NEUROLOGY.

CONDUCTED BY WILLIAM C. KRAUSS, M. D., Buffalo, N. Y.

CLASSIFICATION OF MENTAL DISEASES.

STUDENTS of mental disease (*Med. Age*) will be interested in the system of classification propounded by Dr. Andriezen, based, as he considers, upon fundamental facts of evolution. There are five main groups of insanity, and the words used to designate them explain themselves: (1) aphrenia, arrest of cerebral development with absence or deficiency of evolution in personality; (2) oligophrenia, enfeeblement of cerebral development with a parallel enfeeblement in the evolution of personality; (3) paraphrenia, anomalies and perversions of cerebral development with corresponding evolution of personality; (4) phrenopathia, morbid conditions or derangements occurring in brains of nearly full development with previous apparent health, with corresponding morbid alterations of the personality; and (5) lipophrenia, terminal conditions of mental dissolution secondary to previous insanities. The insanities thus studied fall into five groups which assume serial arrangement.

ACROMEGALY.

DRS. MITCHELL and Le Count (*New York Medical Journal*, April 29, 1899,) from their study of the pathology of this affection, are led to the following conclusions:

1. The cases of acromegaly associated with true tumor of the hypophysis are certainly not as numerous as has been heretofore supposed.

2. There is not as much constancy in the pathologic condition of the hypophysis as there is in an enlargement of the heart, the thyroid gland, or the sella turcica.

3. Acromegaly does not depend, at least not solely, upon abolition of any function of the hypophysis.

4. A relationship between the thyroid gland and the hypophysis has already been amply proved.

5. It is not at all improbable that proliferation of the histological elements of the hypophysis may be instituted in some cases by a primary enlargement of the sella turcica; in other cases, an edema or hemorrhage *in vacuo*.

6. There is no reason for supposing that enlargement of the sella turcica may not be as constant an occurrence in acromegaly as

the changes in other bones, or that it might not take place from a similar cause or causes.

EXPERIMENTAL STUDY OF CHILDREN, MORE ESPECIALLY OF WASHINGTON SCHOOL CHILDREN.

MR. ARTHUR MACDONALD (*St. Louis Medical and Surgical Journal*, July, 1899,) the specialist in the Bureau of education in Washington, studied 1,074 school children with regard to several lines of investigations as follows :

1. Cephalic index and locality upon the skin, with relation to sex, mental ability and sociological conditions.
2. An anthropometrical and sociological study of school children, based upon measurements by the teachers.
3. A purely psychological inquiry as to comparative mental ability in the different school studies as reported by the teachers.
4. A study of the abnormal children.

Conclusions as to 1,074 children specially studied :

1. Dolichocephaly, or long-headedness, increases in children as ability decreases. A high percentage of dolichocephaly seems to be a concomitant of mental dulness.
2. Children are more sensitive to locality and heat on the skin before puberty than after.
3. Boys are less sensitive to locality and more sensitive to heat than girls.
4. Children of the nonlaboring classes are more sensitive to locality and heat than children of the laboring classes.
5. Colored children are much more sensitive to heat than white children. This probably means that their power of discrimination is much better, and not that they suffer more from heat.

Conclusions as to all the school children :

6. As circumference of head increases mental ability increases.¹
7. Children of the nonlaboring classes have a larger circumference of head than children of the laboring classes.
8. The head circumference of boys is larger than that of girls, but in colored children the girls slightly excel the boys in circumference of head.
9. Colored girls have larger circumference of head at all ages than white girls.

¹It being understood that the race is the same.

10. An important fact already discovered by others is that for a certain period of time before and after puberty, girls are taller and heavier than boys, but at no other time.

11. White children not only have a greater standing height than colored children, but their sitting height is still greater; yet colored children have a greater weight than white children—that is, white children, relatively to their height, are longer bodied than colored children.

12. Bright boys are in general taller and heavier than dull boys. This confirms the results of Porter.

13. While the bright colored boys excel the dull colored boys in height, the dull excel the bright in sitting height. This seems to indicate a relation or concomitancy of dulness and long-bodiedness for colored boys.

14. The pubertal period of superiority of girls in height, sitting height, and weight is nearly a year longer in the laboring classes than in the nonlaboring classes.

15. Children of the nonlaboring classes have, in general, greater height, sitting height, and weight than children of the laboring classes. This confirms the results of investigations by Roberts, Baxter and Bowditch.

16. Girls are superior to boys in their studies (but see conclusion 19).

17. Children of the nonlaboring classes show greater ability in their studies than children of the laboring classes. This confirms the results of others.

18. Mixture of nationalities seems to be unfavorable to the development of mental ability.

19. Girls show higher percentages of average ability in their studies than boys, and therefore less variability. This is interpreted by some to be a defect from an evolutionary point of view, but see conclusion 16.

20. As age increases brightness decreases in most studies, but dulness increases except in drawing, manual labor and penmanship; that is, in the more mechanical studies.

21. In colored children brightness increases with age, the reverse of what is true in white children.

Conclusions as to children with abnormalities :

22. Boys of the nonlaboring classes show a much higher percentage of sickness than boys of the laboring class.

23. Defects of speech are much more frequent in boys than in girls.

24. Boys show a much greater percentage of unruliness and laziness than girls.

25. The dull boys have the highest per cent. of unruliness.

26. Abnormalities in children are most frequent at dentition and puberty.

27. Children with abnormalities are inferior in height, sitting height, weight and circumference of head to children in general.

THE RELATION OF HEADACHE TO AFFECTIONS OF THE EYE.

DR. SAMUEL D. RISLEY, of Philadelphia, read a very interesting paper (*Virginia Medical Semi-Monthly*, August 25, 1899,) on headache and eye affections before the neurological section of the American Medical Association, at the Columbus meeting in June, 1899. The author stated that in the last 1,000 eye private patients applying for treatment for all causes, 50 per cent. of them complained of this symptom. A large percentage of these came by the advice of their family physician, or through the persuasion of a friend, complaining of headache alone, and were unconscious of any ocular trouble.

The author pointed out the relation between abnormalities in the shape of the eye-ball upon which errors of refraction ordinarily depend, and the faulty form of the bony orbit associated with certain distortions of the skull, and called attention to this fact as one of the instances in which disease and impairment of function depend upon a congenital anatomical deformity.

The sudden onset of headache during or after middle life, or following recovery from acute disease, does not exclude the eyes as an etiological factor. The main points of the paper were enforced by brief histories of illustrative cases representing different groups of patients.

The paper was then summarised in the following conclusions as established by clinical experience :

1. That abnormalities of the ocular apparatus are, in a large group of patients, the sole and sufficient cause of headache.

2. That these abnormalities of vision may be the unsuspected cause and, therefore, the absence of symptoms obviously referable to the eyes does not exclude them as an etiologic factor in headache, insomnia, vertigo, petit chorea in children, and certain stomach derangements.

3. That the recent or sudden development of symptoms—*e. g.*, after attacks of severe illness, as typhoid fever, the exanthemata,

or in association with more or less acute exacerbations of some general dyscrasia—is not sufficient evidence against ocular participation in causing the symptoms.

4. That the participation of the eyes as an etiological factor in headache can be positively excluded only in the absence of ocular disease or after the most painstaking correction of any existing error of refraction or abnormality of binocular balance.

5. That, for the relief of reflex symptoms, accurate corrections are essential, and these can be secured only by the more or less prolonged use of a strong cyclophlegic.

6. That immediate relief by these corrections, in a large group of patients, is not to be expected, since the pain is frequently due to associated pathological conditions of the fundus oculi, and these require time for cure.

KERNIG'S SIGN.

IN DELIVERING (*Boston Med. and Surg. Jour.*) the Cavendish lecture before the West London Medico-Chirurgical Society on Cerebro-spinal fever, Dr. William Osler spoke as follows on Kernig's sign.

Described by a Russian physician, and studied in Germany and France, this interesting sign has not attracted the special attention of English and American physicians, though J. B. Herrick, of Chicago, at the last meeting of the Association of American Physicians, spoke of its value. It has been present in all of our cases in which it has been looked for. It is, I think, an old observation that the subjects of protracted meningitis, particularly children, very often lie with the thighs flexed upon the abdomen, and with the legs in a state of partial contracture, so that they are with difficulty extended. To test for Kernig's sign the patient should be propped up in bed in the sitting position, then, on attempting to extend the leg on the thigh there is contraction of flexors which prevents the full straightening of the leg. On the other hand, in the recumbent posture the leg can be fully extended. Many patients with meningitis are not in a condition to sit up, and the test can be equally well made by flexing the thigh on the abdomen, when on attempting to extend the leg, if meningitis be present, the limb cannot be fully extended. Friis found the sign in fifty-three or sixty cases, and Netter in forty-five or fifty. It is stated to be present in all forms of meningitis when the spinal meninges are involved. The presence of the sign is no indication of the intensity of the spinal involvement, as it existed in a very marked degree in a recent case of pneumococcic meningitis,

in which there was no positive exudate on the spinal meninges, only a turbid fluid. Netter's explanation of the phenomenon is as follows: "In consequence of the inflammation of the meninges the roots of the nerves become irritable and the flexion of the thighs upon the pelvis, when the patient is in a sitting position, elongates and consequently stretches the lumbar and sacral roots, and thus increases their irritability. The attempt to extend the knee is insufficient to provoke a reflex contraction of the flexors while the patient lies on his back with the thighs extended upon the pelvis, but it does so when he assumes a sitting posture.

PHYSICAL CONDITION OF THE INSANE.

DR. R. GANTER (*Allgemeine Zeitschrift f. Psychiatrie*) recently studied the physical anomalies of 345 cases of insanity at the asylum at Trier, noting carefully the anomalies of the skeleton, skin, reflexes and sensory organs. The different groups were divided as follows: 119 cases of paranoia, 133 of dementia, 3 of dementia senilis, 12 of paresis, 48 imbeciles and idiots and 30 epileptics. 17.7 per cent. offered no anomalies; 31 per cent. showed 1; 25.5 per cent., 2; 13.9 per cent, 3; 8.1 per cent., 4; 2.9 per cent., 5 and the same number showed 6, 7 or 9 anomalies.

Othematoma were found on sixteen ears among twelve patients, none of whom were paretics.

Selections.

A STUDY IN INVOLUTION.

By A. FERREE WITMER, M. D., Philadelphia, Pa.

[Proceedings of the Pathological Society of Philadelphia, Vol. II., No. 4.]

IT IS quite well known that man at different periods of his life is subject to varying forms of disease; thus we find disorders incident to childhood, those induced by the exposures of mature life, and those due to senility; in short, disorders of evolution, of maturity and of involution.

The time in which the first are observed is naturally from conception to the end of the period of growth, which occurs usually at the age of twenty; the second are found from that time to about the age of fifty, and the third from about fifty to the close of life.

The disorders most common to old age are fatty degeneration and calcification of the arteries—*i. e.*, we find at a time past the middle life abortive attempts on the part of nature to reconstruct the tissues, attempts that, owing to failing metabolism, never reach full organic requirement. The time at which this condition of enfeeblement may set in is not absolutely fixed; not infrequently it is found at thirty or even less, so that there has grown up in medicine the now trite saying that “man is as old as his arteries.”

It is, however, to a broader conception of involution that I ask your attention: to what, indeed, might well be called the atavistic tendency of diseased tissue. As the nervous system is most highly specialised it is naturally to this tissue that one turns for confirmation of this view. Let us glance first at one of the most common of all the disorders of the nervous system—neurasthenia.

Two forms of this affection are recognised: the one called symptomatic, resulting from fatigue states, in which the nerve exhaustion is obviously secondary; the other, called essential, resulting from no known cause, unless one be willing to accept the possibility that these patients are—to use a vulgarism—born tired. It is significant that the essential form of neurasthenia does not respond favorably to treatment.

Upon examination of the bodily fluids in these individuals we are impressed by the excessive quantity of uric acid secreted; so great, indeed, that one is almost forced to the opinion that the normal secretion in these patients is similar to that in animals below the mammals in the zoologic scale.

That neurasthenia, although called a functional disease, has a definite pathology is highly probable. I have but to refer to the classic experiments of Hodge¹ to recall to you the marked cellular changes induced by excessive activity in the nervous system of the pigeon, bee, etc.

The findings of Hodge, in brief, are as follows: *a.* For the nucleus: 1, marked decrease in size; 2, change from a smooth and rounded to an irregular outline; 3, loss of open reticular appearance, with darker stain. *b.* For cell-cytoplasm: 1, slight shrinkage in size with vacuolation of spinal ganglia, considerable shrinkage with enlargement of peri-cellular lymph spaces for cells of cerebrum and cerebellum; 2, lessened power to stain and to reduce osmic acid.

It may reasonably be inferred from these careful experiments of Hodge that similar changes might result from over-stimulation of the cell bodies in man.

Granting, then, that neurasthenia may be classified as a disease and not as a "neurosis," we find that certain races fail to meet the nervous outlay demanded by the changing requirements of civilisation. This is particularly marked in the negro and American races.

Since the Civil War the ratio of insanity among the 'freed blacks has materially increased. Tuberculosis and syphilis, both of which are regarded as diseases coincident with civilisation, have also increased greatly in this race. The decay of the American race is equally well known. Another instance is afforded by the Russian Hebrew who shortly after immigrating to America, begins to feel the stress under which he is laboring. I can safely say that 90 per cent. of the Russian Hebrews who apply to our nervous infirmaries for treatment are neurasthenic.

There is apparent, then, in neurasthenia of the essential type a diminished virility of the nervous system and a reversion of the type of secretion.

The next nervous affection to which I invite your attention is unmistakably organic, amyotrophic lateral sclerosis. The wasting of the hand, which begins first, and becomes most advanced in degree, presents the characters of the simian type. The curved group which limits the ball of the thumb is present, but owing to the wasting of the eminence is not so marked as in the normal hand of man. The longitudinal grooves in the palm are also deeper than in the normal condition; the thumb, in short, becomes markedly subordinate.

In disorders of the nervous system, resulting from cerebral hemorrhage, and the like, we find that as improvement sets in the flexor groups of muscles are the first to respond. Frequently this relative over-activity becomes so great that the hand assumes the position of partial flexion known as the claw-hand. This condition is not difficult to interpret if we accept the proposition that the extensors are innervated from the brain and the flexors from the cord. Some of you have doubtless seen instances of a similar flexor activity in members of the feeble-minded class who, while unable to perform any other gymnastic feat, can hang for quite long periods of time by grasping some horizontal support. In the early days of life of the normal child a like condition has been noticed.

Again, among the feeble-minded there occurs not infrequently a typical Mongolian cast of features, known as the Mongolian form of idiocy. While I do not wish to be understood as considering the Mongolian, a race inferior to the Caucasian, yet the appearance of a

Mongolian type as the descendent of a pure Caucasian stock must be considered atavistic.

In mental diseases we find that when hallucinations are present those of hearing are most common, while those of smell are comparatively unknown. Bucke¹ has recently referred to this, and adds: 1, that the longer a race has been in possession of a given faculty the more universal will that faculty be in the race; and, 2, conversely, the more recent is any given faculty the more easily it is lost. In the ontogenetic development of man we must not forget that hearing is the latest to develop and smell the earliest.

F. P. Henry, quoted by Harrison Allen,³ has shown that in pernicious anemia the red blood cells approach those of the lower animals in many if not all of their characteristics, viz., in their number, size, shape and amount of hemoglobin they carry. The number of red blood cells is reduced to a degree that is normal in the cold-blooded animals; the corpuscles being increased in diameter, are occasionally nucleated and have a tendency to assume an oval outline. The type of blood resembles the ancestral shape, Henry argues, because the corpuscles have lost the shape which is characteristic of their high position in the zoologic scale.

A condition of much interest occasionally found in man is rumination. It is noted in the human ruminant that the regurgitation of the food begins usually half an hour after its ingestion, and recurs at regular intervals for about two hours. The food during this time tastes sweet, not at all like the sour material that is thrown off in digestive derangement.

Rumination in man is generally regarded as practically identical in its mechanism with that of the herbivora, although as Riesman⁴ observes, we are still ignorant of its ultimate cause.

Recently a case has been reported in which direct inheritance has been traced—the grandfather and father of the patient both being afflicted with this affection. This case is reported by Runge,⁵ who argues as a likely cause the development of the stomach by the laws of natural selection, by which the conditions of the animal are adopted to the environment. Sinkler⁶ is opposed to this view on the ground that the connection between man and the ruminant with his four stomachs is too remote. To the writer this last objection seems hardly tenable, as the time-element cannot be considered with any definiteness in the evolution of man.

It is generally agreed that the power of self-control largely distinguishes man from the lower animals. The morale of the defective

class is notoriously bad. The appetites run wanton, every wish being gratified at the earliest possible moment.

We find in epilepsy, for instance, that gluttony is the rule. Of 100 cases taken consecutively, I find the appetite markedly ravenous in eight, excessive in 75, average in 4, variable in 6, and poor in only 7.

In the foregoing illustrations are represented disorders both of a functional and of an organic nature, those in which a fundamental disorganisation has taken place and those in which a mere quality has been disturbed.

Other disorders that show atavistic tendencies might be mentioned, but sufficient, I think, have been given to indicate the part that atavism plays in inducing derangement of the human nervous system.

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A DECISION AGAINST HEALERS.

THE christian science, Zion curers, faith healers of Chicago have run up against a learned judge at last. The following are the circumstances of the case:

Mrs. Flanders, into the circumstances of whose death the investigation was made, died at St. Luke's Hospital of blood poisoning, which the physicians which were called to attend the woman just before she died assert was the result of medical and criminal neglect. Mrs. Flanders was a believer in "divine healing," and a member of the Divine Healing Mission in Michigan avenue, near Sixteenth street, of which institution Dr. Dowie calls himself "general overseer."

Nearly two weeks ago, on being taken critically ill, Mrs. Flanders requesting that Mrs. Bratz be summoned to her bedside to administer "divine healing." According to Mrs. Bratz nothing was done to relieve her patient's sufferings by physical means. Mrs.

Bratz, however, in accordance with the belief, said prayers, and when it was found that Mrs. Flanders was getting worse Dr. D. C. Holmes was called from the Zion Home to assist in the praying.

A few days later the patient became delirious. After a week of "divine healing" Mrs. Flanders was still worse and Dr. H. D. Peterson was called. It was he who first called the attention of the State Board of Health to the matter. He asserts that Mrs. Flanders was delirious and was suffering from blood poisoning when he arrived at the Flanders home. Removal to St. Luke's Hospital was ordered as the only chance of saving Mrs. Flander's life. At the hospital she was found to be beyond medical aid and dying.

Dr. Peterson testified that the blood poisoning of Mrs. Flanders was the result directly of medical negligence.

The defense of the Dowie officials, as given out by Dr. Speicher was that Mrs. Flanders died at the hospital and when not in the care of Mrs Bratz.

The case came to trial August 16th, when Mrs. Bratz, was fined \$100 and costs in Justice Everett's court for practising medicine without a license. She was the nominal defendant, but the center of interest to the spectators and the one whom the decision affects even to a greater degree was Dr. John Alexander Dowie. If Justice Everett's opinion is sustained in the higher court the leader of the Zion movement, lawyers say, no longer can cure by "the laying on of hands." An appeal was taken to the Circuit Court. John Stearns signed the \$250 bonds.

The defense introduced no witnesses, but asked that the case be dismissed on four grounds, including that Mrs. Bratz did not act as a physician, that the law forbade any interference with those who believed in the efficacy of faith cures and that neither the state nor the nation had any right to interfere with the practice of any religion.

These grounds, on which the leader and members of the christian catholic church based their defense, were admittedly points which a justice court cannot decide and which must be carried higher.

In his decision Justice Everett said :

There is no question as to the right of every man to have and to hold his own religious belief and no question as to the right of a man to call upon whomsoever he sees fit to treat him during sickness, no matter what school of medicine or school of treatment the person called upon belongs.

There is no question but that a man can call in a person to treat him who resorts to spiritual or mental means to cause him to recover his health. But the law does say that, where a person resorts to

the use of medicine, because the use of drugs is dangerous, the person shall have a license to practise. There is no question but that the members of this faith can treat within the meaning of the faith as long as the faith does not overlap the law.

If Mrs. Bratz treated Mrs. Flanders by mental or spiritual means without the use of drugs or material remedies she is innocent. The whole case simmers down to this point. Even if a person does not use drugs or material remedies and does not limit himself or herself to spiritual or mental means they are, in my opinion, clearly liable. When the defendant resorted to physical means of any kind by putting her hands on the decedent then she is liable under the law.

The line must be drawn sharply and right at the spiritual end and stop there. In this case the defendant fell back upon her experience and not upon her faith and resorted to physical means. I have nothing against the followers of the faith of Zion. I have noticed in the whole course of history that when the civil courts endeavor to disparage the tenets of any religious faith the courts have been worsted.

I believe Pontius Pilate was the first to make such an attempt. I do not desire to emulate him, although in this matter I do not intimate that I have the same object before me. The defendant is fined \$100 and costs.

We gather the foregoing from the *Chicago Tribune* of recent date. The *Tribune* also published an able editorial concerning the death of Mrs. Flanders, which we would be glad to reproduce did space permit.

A MEDICAL LAW FOR MICHIGAN.

By the (*Medical Age, Detroit*,) terms of the Chandler bill, which by the signature of the governor becomes a law, the State of Michigan will reap the advantage of a measure which is as satisfactory, as that which is operative in any other state of the Union. The terms of this enactment include the following provisions:

1. The appointment of a medical board of registration composed of five regulars, two homeopaths, two eclectics, and one physiomedicist. The members of this board, which meets twice each year at Lansing, form the executive force of the law.
2. The reregistration of all physicians in the state who furnish proof to the board that they are legally registered under the act of 1883. This is expected to shut out the holders of bogus and fraudulent diplomas, and was bitterly fought by some so-called medical "colleges" for that reason.
3. The recognition of foreign certificates of registration or licenses issued where the requirements for registration are at least

equal to those required here; but the county or state so recognised must extend a like privilege to holders of certificates from the Michigan board.

4. The recognition of diplomas from such legally incorporated and reputable colleges of medicine in the United States as shall be approved for in the foregoing.

6. The reporting monthly to the board by the several county clerks in the state of the registration made, removals and death.

7. The enforcement of the act by the board direct, not by local authority, as under the old act.

Abstracts.

LA GRIPPE—ITS MANIFESTATIONS, COMPLICATIONS AND TREATMENT.

By W. W. GRUBE, A. M., M. D., of Toledo, Ohio,

Professor of physiology and clinical medicine, Toledo Medical College, Toledo, Ohio.

[Abstract from the *Journal of the American Medical Association*, March 25, 1899.]

PROFESSOR GRUBE sees no reason why the intelligent observer need err in his diagnosis of la grippe; he believes that the intensity of the catarrhal symptoms the great prostration, and tardy convalescence form a typical clinical picture. Though the catarrhal symptoms are usually limited to the respiratory mucous membrane, they are not always so, and in the writer's experience the invasion of the mucous membrane of the digestive tract has been quite frequent. Not alone mucous membrane, but a part of all of the cerebro-spinal axis has been invaded.

In many cases the so-called complications are simply an extension and aggravation of the catarrhal or inflammatory condition; thus an extension of the usual inflammatory condition of the throat through the Eustachian tube produces middle-ear complications; the bronchitis, too, may extend and become capillary, or even a pneumonia may result. So we believe that in the so-called abdominal form with severe gastro-enteric catarrh, it may extend by *contiguity* and inaugurate a general peritonitis. Upon this theory alone can we explain the supervention of a severe general peritonitis in a case under our care, now happily terminating in convalescence.

The patient was a girl of 11 years who had never been seriously

ill before. Twenty-four hours after the illness began, she had, besides the usual alarming symptoms of la grippe, a high temperature, wild delirium, constant emesis, frequent and copious discharge of feces and urine. The appropriate remedies were prescribed, the vomiting ceased and she rested; but on the third or fourth day she developed symptoms of peritonitis, abdominal pain, hardness and some tympanites. Calomel was prescribed, twenty grains divided into four powders, one every three hours; also the usual turpentine stupes and morphia to quiet pain. The next day, finding no improvement, but rather aggravated symptoms, green vomit, bowels not moved—a very gloomy prognosis was given, and at the family's request a consulting physician was called, who concurred in diagnosis and prognosis, and had nothing more to suggest. On the writer's return in the evening, however, he decided in view of the great mortality of these cases by the routine treatment, to try the local application of a mustard poultice; also, for their germicidal, antiseptic, and healing qualities, he gave internally hydrozone diluted, in frequent doses, alternating with doses of glycozone. In twenty-four hours there was slight improvement. In forty-eight hours the patient was decidedly better. Improvement continued and the girl was so well February 21st, that she was dismissed as cured.

Perhaps the most common complication in children is the middle-ear inflammation caused by extension of the pharyngeal catarrh up the Eustachian tube into the tympanum. In the case of a child six months old, recently under our care, we had a middle-ear complication, in which the pain was controlled by the usual methods and by the instillation into the aural canal of a few drops of cocaine solution. After suppuration occurred, however, the canal was cleansed by hydrozone solution (warm) and a piece of absorbent cotton saturated with glycozone used as a dressing by inserting it into the canal. As the ear complications sometimes prove very serious, it is gratifying to know that in the above remedies we have a safe, speedy and effectual method of cure. We believe also that, if these cases were seen early, by proper treatment the extension and consequent complications might be prevented. In a little girl with severe tonsillitis and pharyngitis we are now spraying the throat with diluted hydrozone and applying glycozone with such marked benefit that on this, the third day of treatment, she is almost well.

In concluding Professor Grube states:—"I cannot refrain from referring to the case of a prominent city official who had an unusually severe attack of la grippe. All the structures of the nasal

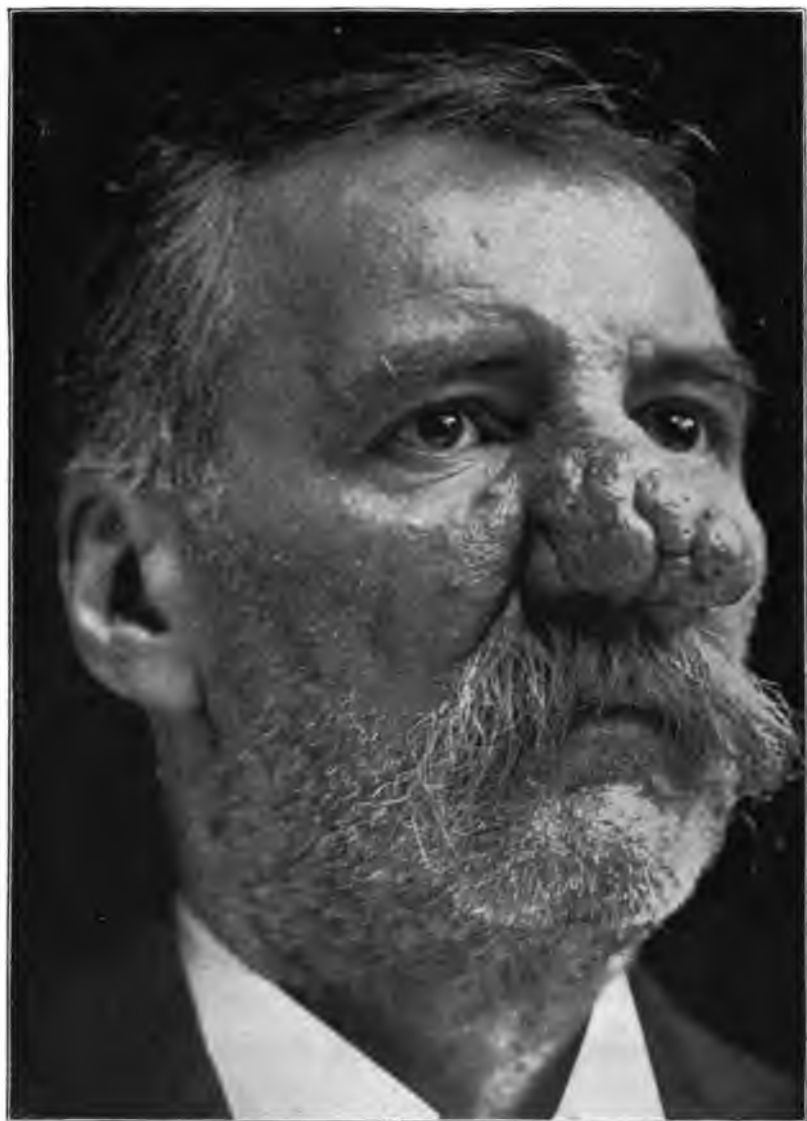
cavities were involved in a severe acute catarrh, which progressed at the stage of suppuration. Enormous quantities of pus were secreted, and the location and intensity of the pain led us to fear involvement of the antrum. However, the free use of hydrozone solution by spraying and the application of glycozonesoon cleared up the cavity, and in a few days complete cure resulted."

A SUBSTITUTE FOR SUGAR IN DIABETES.

NOTWITHSTANDING the large number of remedies brought forward from time to time for the cure of diabetes, the dietetic treatment still continues to occupy the most important part in the management of this disease. In view of the fact that in severe cases the use of starches and sugars is absolutely interdicted, much ingenuity has been exercised in devising substances which would replace these foods. While the attempts to produce substitutes for starchy foods have not been very successful, much has been accomplished in the discovery of artificial sweetening agents, which enable the patient to gratify his craving for sugar, without producing the harmful effects of the latter. Among the sugar substitutes sycose represents the latest stage in the evolution of a perfect product of this kind. It has a sweetening power of 550 times greater than that of cane sugar. Owing to its chemical purity, its freedom from the inert matter found in other substitutes for sugar, its pure taste and solubility, it is eminently adapted for medicinal use. Sycose is therefore well worthy of a careful trial in the treatment of diabetes and of all other diseases in which the use of ordinary sugar in any form is contraindicated.

CONGENITAL NASAL ATRESIA.

DR. HAL FOSTER (*The Laryngoscope*, May, 1899,) reports an interesting case of congenital nasal atresia in a boy eight years old. According to the mother's statement the nose was closed at the child's birth. There was no other deformity. On examination a definite white fibrous membrane stretching between the septum and the side wall of the nostril was found. Occlusion existed on one side only. As there was a history of syphilis in the boy's father specific medication was resorted to for eight weeks. At the end of that time the membrane was divided by a surgical drill, and the galvano-cautery applied, after which a small Asch nasal splint was inserted and held in place by a piece of plaster. Antiseptic sprays were used three times daily, and euophen blown into the nose every morning. Under this treatment a perfect cure was effected.



WENDE : RHYNOPHYMA.

Special Article.

RHYNOPHYMA.

By ERNEST WENDE, M. D.,
Professor of dermatology, University of Buffalo,

AND

GROVER WILLIAM WENDE, M. D.,
Clinical professor of dermatology, University of Buffalo.

THE accompanying illustration conveys an excellent idea of a Bohemian, 48 years of age, with the unequivocal marks of the condition under consideration graphically portrayed. He is a burly looking gentleman, of gaunt and intermediate stature, erect carriage, and buoyant spirits. Barring the disfigurement, which is singularly acute, he possesses fair features with brown hair. His habits, excepting an unquenchable thirst, are good. His fondness for beer is especially well established. It is his custom, during the hours of employment, rather to palliate the morbid desire for drink than to be confused by the uncertainty of taking too much. Productiveness becomes the result of submission. Disposed to joy and pleasure, cares disappear, and, dissatisfied with the drugging of the week, he consecrates Saturday evening and Sunday, by taking a full course, to enjoy a relaxation suitable to his means and peculiarities. His bibulous propensities were contracted early in life, and have continued to the present time, yet, in defiance of this manner of living, he was always industrious and never indolent.

The unwisdom of these beery indulgences at fixed periods often induced intestinal distress and diarrhea, which were additional penalties, in his case, for a violation of nature's laws. Nature is relentless, and knows nothing of extenuating circumstances; she never forgets and never forgives.

The digestive impairment brought about by his rhythmical habits of an unmitigated curse, that exercised such an injurious influence upon the significance of his nose as an attribute of beauty, is a just recognition of the futility of fighting against nature.

It is not a pleasant picture, by any means, but it happens to be a truthful portraiture, and it will not mend matters to close our eyes against the facts. Such facts should be an effectual check upon the vast majority of those who might wish to imitate. The effects, like the beverages, may be mixed and mingled in all proportions, as an equitable adjustment to suit the taste of the consumer.

It would be idle for the physician, in a disease like this, where there is so much to admire that is interesting and complex in its

properties of organised structure, to excite a morbid repugnance. He will find it more profitable to carefully study the circumstances which interrupted the harmonious equilibrium of the various functions performed by the skin, with a view of developing an appreciation of its pathological departure, character and gradations.

It is manifestly easy to divide the evolution of acne rosacea into three stages, merging into one another of which rhynophyma, consisting of a gradual hypertrophy of elastic tissue, often of monstrous proportions, represents the final termination. The first indication of embarrassment to our patient was a diffuse redness, particularly confined to the extremity of the nose which was disturbed on slightest provocation, becoming more vivid in appearance when exposed to sudden vicissitudes of temperature, or after a hearty repast, and especially when associated with the glass that cheers. For a long time, following the inception of the disease, the erubescence was localised and transitory in character, but after a while it diffused itself over the entire nose, and finally extended in a symmetrical manner over the contiguous surface, involving the greater portion of the cheeks, forehead and chin. The discoloration now became permanent and more profound.

The capillaries were dilated and tortuous and the blood circulated slowly through them. There was a tendency toward stasis. The condition of the skin was decidedly unctuous and cold to touch, yet, at intervals, a sensation of heat and fulness prevailed, depending undoubtedly, upon some special source. The hyperemia, which was at first recurrent and then permanent with exacerbations, soon developed papules in the papillary layer, and likewise as a complication, acne pustules. This state of affairs, since its incipency, has been about twenty years in formation, when the patient, participating in a melee, was struck by a brick, causing three distinct ruptures of the skin, radiating from the tip of the nose. The necessary stitches were promptly taken, the wound properly dressed which healed quickly with a marvelously good result. However, shortly thereafter, it was noticeable that the organ began to enlarge with perceptible rapidity for two years, and then gradually to reach its present proportions.

The hypertrophy at first was especially well-marked at the point of injury. The acne papules and pustules, which from time to time were found disseminated over the hyperemic area, have entirely disappeared. They were practically nonexistent one year ago.

After this cursory consideration, it is discernible that the persistent hyperemia caused an induration of the skin, the glands and bloodvessels of the whole nose, while dilated venules course over its surface. The hypertrophic changes which have ensued to

produce this degree of distortion in our subject, assume the appearance of an embossment clump or bump that can be resolved into divers conspicuous and well-defined masses or lobes, separated by deep clefts and wide fissures. These rifts, which form the capital letter H at the summit of the nose, are particularly well pronounced, splitting it into four irregular rough and tubercular eminences. The columella is but slightly involved, while the end and the sides of the nose are greatly expanded, by a persistent, intensely florid, but non-inflammatory nodulated thickening which, upon palpation, is doughy and elastic. The skin is coarse, uneven, and studded with numerous deposits of a hard inspissated sebaceous matter, and its surface is pitted with a profusion of pores, some of which gape widely and, upon pressure, a vast quantity of sebum, emitting a disagreeable rancid odor, can be liberated. Concerning the color, it may be said that in the beginning it was a gorgeous red which, up to a certain period, as time went on, mysteriously and unperceptibly changed into a Bishop's purple, but, with advancing age, again began to fade so that now it has assumed almost a normal tint.

This case is instructive, in that the history reveals, in a satisfactory manner, all the characteristic features that enter into the three stages that go to make up this chronic composite affection of the face and particularly of the nose, which is generally years in formation.

To particularise in brief :

1st stage.—A recurrent hyperemia, in the form of an erythematous redness, which occurs in irregularly-shaped patches, giving the skin a mottled aspect accompanied with an inclination to stasis.

2d stage.—A permanent hyperemia often associated with acne and a varicose state of the various radicles of the skin.

3d stage.—A hypertrophy of fibrous tissue in the form of red or violet colored tubercles of various size, which may be either discrete or confluent.

Predisposition, like in many other skin manifestations, is a necessary factor, but the exciting causes are, for the most part, different in the two sexes. In women, the condition of the system that precedes a menstrual period is a universally recognised element. In men, according to the views of numerous authorities, it is an over-indulgence in alcohol.

In this instance, too, the beer was grateful to our patient at the time, whatever the after-effects. Yet, we are of the opinion that, in this case, the injury had much to do in determining rhynophyma,

the third and highest degree of the malady which is quite rare, while the first two stages, like "nipping," are common. Then, again, it has occurred in persons of temperate, even of abstemious habits.

The suppletory photo-micrograph, emphasises the pathological evidences most strikingly. The epidermis, maintaining its natural outline, is considerably thinner than normal, and the interpapillary processes extend much deeper into the underlying corneum. The bloodvessels are increased in caliber, and their coats much thickened.



The sebaceous glands are greatly enlarged and filled with sebum, while their ducts, with somewhat hypertrophied walls, terminate in a funnel-shaped opening upon the surface.

The large cavity in the illustration defines the presence of a retention cyst lined with a membrane composed of a dense connective tissue, on the interior of which, in some instances, cellular elements may be seen to cling. The connective tissue of the corium is greatly augmented, and it is this which principally gives rise to the hypertrophy and grotesque appearance.

The adaptation of proper therapeutic measures must naturally vary with the cause and stage involved.

After a careful inquiry into all the circumstances in the case under consideration, it was absolutely necessary, early in the disease, in justice to himself and to the public, that he should have submitted gracefully to a regulation of diet and a forbearance of the Circean cup. A will or a determination, on his part, could have prevented veiled insinuations, and avoided a publicity of his wares. However, a great deal can yet be accomplished by judicious interference. The method that promises the most for its ablation would be an excision of the exuberant growths.

In our judgment, the opportunity for its removal by means of galvanism, punctures, scarifications or cauterisation is past.

Beer, honest beer, to what base uses may you not be brought?

Now, he is only at ease when he tempers his sorrow by singing "Auld Lang Syne."

LATENT RHEUMATIC CONDITIONS.—The physician is frequently called upon to treat patients, who though not ill enough to be in bed are not at all well. Their appetite is capricious, they sleep indifferently, or even if they sleep soundly they are not refreshed; in the morning they are more fatigued and ill at ease than was the case on retiring. Upon awaking there is frequently an aching sensation in the loins, sometimes in the lower limbs, which is noticed upon getting out of bed or in dressing, particularly in putting on their hose or in lacing their shoes. As the day progresses this soreness may partially wear off, but there is at all times a vague, undefined, uneasy, painful feeling.

A competent examination of the urine in these cases will in almost every instance be found to disclose a notable absence of the soluble urates. On the contrary, it may be loaded with the phosphates and very frequently bile will be present as also uric acid. If the condition remains neglected, the probable results will be sooner or later a pronounced attack of rheumatism in one or another of its forms. All that is needed to induce such a condition is a sudden change in the weather or exposure on the part of the patient to cold or wet, or a combination of the two. This is due to a latent rheumatic diathesis, to which every adult is liable.

In such cases the physician will find tongaline in any one of its forms, as indicated, given at short intervals with copious draughts of hot water, a remedy which goes directly to the source of the trouble. Tongaline seeks out the retained excretions or perverted secretions, which it either neutralises or renders amenable to the physiological action of the emunctories, and then it brings to bear its strong eliminating powers, correcting the complaint promptly and thoroughly.

—*Clinical Notes.*

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges should be addressed to the editor: 284 FRANKLIN STREET, BUFFALO, N. Y.

VOL. XXXIX.—LV.

OCTOBER, 1899.

No. 3.

THE MEDICAL DIRECTORSHIP OF THE EXPOSITION.

THE proposition has been advanced by a newspaper that it is quite possible the Pan-American Executive Committee will find it difficult to appoint a medical director for the exposition. In support of this stand the newspaper in question pointed out that professional jealousies would seriously interfere with the naming of a man. Then the question of compensation was taken up, and quite unblushingly this newspaper declared that the honor of the position would in a large measure pay for the physician's time, that it was a responsible post and one which would bring its appointee prominently before the public.

All this may be true. The man who is appointed medical director will unquestionably be before the public. He will also practically be responsible for the health and welfare of the thousands upon thousands of people who will attend the exposition. There is a certain amount of honor connected with the position, but there is, too, a great responsibility, and the compensation should be adequate and generous.

The appointments which have been already made, carry with them good salaries and likewise considerable honor. There was not at any time any disposition shown to pay for the work to be done in honor, and there should not be in the case of the medical director.

Any physician who would accept the post at a niggardly—or, to be less harsh, let us say nominal—salary would be reflecting great discredit upon his profession and discounting his own ability.

The medical department of the coming exposition is the most important of all. How long, pray, would the exposition last, did

an epidemic break out? The work of a medical director must be ceaseless, and he should be paid proportionately.

If the Pan-American Exposition executive committee has any idea of appointing as medical director a man who will accept the place at a niggardly—again, let us be less harsh and say nominal—salary, the JOURNAL would suggest that a funeral director and a superintendent of cemeteries be added to the working force, and that provision be made for a quarantine hospital.

The JOURNAL, however, does not believe the executive committee will permit itself to be influenced in any way by the newspaper referred to, but that it will, when the time comes, appoint as medical director, a man of wide experience, a man of standing and reputation, and, most important, a man of executive ability. The members of the committee are men of business experience and wisdom and would hardly err in so important a matter.

STREET NOISES AND HEALTH.

WE HAVE on several occasions during the past seven or eight years in the columns of the JOURNAL, invited attention to the deleterious effects of noise upon the people, especially the sick. Many scientific papers have been read at medical societies on the subject, some of which have been published in this magazine. The popular magazines, too, have printed many able articles relating to and dealing with it in a manner that ought to command attention.

We are not aware that a single official in this city from the highest to the lowest has ever paid the slightest heed to the question, or taken any action looking toward the abatement of the nuisance. It is, however, a subject of growing consequence, increasing with the extension of the city and soon will attain such proportions as to compel action to abate it in part and to restrain it in other part.

There are many noises in a large city that are necessary to the conduct of its affairs, but there are many others quite unnecessary, made by the heedless, and tolerated by the indifferent public.

It is not our purpose at this time to particularise,—we have done that heretofore—but rather to again call up the subject in hopes, in view of the great exposition in prospect, that something may be done in the premises.

To emphasise the importance that attaches to the question, we subjoin a letter published in a recent edition of the *New York Tribune*, to which we invite thoughtful attention:

To the Editor of the Tribune;

Sir.—I was out when your reporter called yesterday, and I now ask a little of your space to emphasise the point of the value of specific complaints, full and frequent, in all cases of noise which is detrimental to health. Experts in London have at times shown that cases of insanity, softening of the brain and kindred ailments, even resulting in death, have been distinctly traced to persistent distressing noises on the street.

Headaches are often caused by the passing of wagons laden with iron and the unloading of coal. In England coal dealers are now required to deliver coal in bags, carried and emptied by hand.

When the Lexington Avenue road was being built, a friend of mine who was sick in Thirty-seventh street was made doubly ill by the noises day and night of unloading iron, etc., on that avenue.

Dr. Feeney, of the Health Board, made to your reporter what seems to me a very inadequate statement of the case. He knows, as I do, that there are two sections of the consolidation act which have been made a part of the Greater New York charter that confer extraordinary powers on the Board of Health, in the interests of the public even when purely sanitary questions seem not to be involved.

The Board has ample power, and if citizens will only send us the correct data we will see that the matter is brought directly before the proper authorities. This society did its share to suppress the dead man's curve at Fourteenth Street, but we no more than a grand jury indictment could prevail in the premises. When, however, the Board of Health sent out its mandate, the nuisance was abated, and this is but one of a dozen like instances.

The Board, I repeat, has ample and complete power, and all our citizens must remember this and fail not to report every case of unnecessary noise, with all the facts as to the name and date, to the Board direct, or to this society.

We want more "kickers." New-Yorkers are too long-suffering and complain too little. Our society has not one-half as much to do as it should have, if our people would be less pessimistic and have more confidence in their own judgment as to what is a nuisance, and what is "dangerous to life or detrimental to health."

Berlin and London are improving steadily in this matter of suppressing unnecessary street noises, and surely we should not lag as far behind.

JOSIAH C. PUMPELTY.

No. 12 East Twenty-third street, Sept. 8, 1899.

Secretary City Improvement Society.

That one city is making progress is shown by the following view of the question as it affects London. The *Medical Press and Circular* in speaking of the work of the London Society says:

The life of the average citizen is becoming more tolerable, so far as street noises are concerned, a happy state of things which is due

not to the fact that he has become accustomed to such nuisances, but because the streets are quieter than they used to be. In a certain measure a good influence has been exerted in this direction by the London Society for the Suppression of Street Noises. Although only in the second year of its existence, the society, as its report for the past year shows, has been steadily pressing forward an admirable campaign against the soul-disturbing costermongers and newsboys, who make the thoroughfares hideous with their yells and howls. Moreover, it is satisfactory to note that the society has a well-designed program in the pursuit of which its members intend to expend their best energies. For example, among their objects of reform are included the compulsory fixing of India-rubber tires on all vehicles, floors of the same material for milk-carts, the establishment of kiosks in place of the screeching newspaper boys. But even if all these reforms were successfully attained, many more noises would still be left to be dealt with. The bawling coal hawker, for instance, is an intolerable nuisance, and the irritating, expressionless, metallic clang of the barrel organ should be banished altogether from the streets. Possibly, however, when the London Government Act comes into force, marked improvement will be noticed in regard to the prevalence of street noises, inasmuch as the new municipalities have been empowered to make by-laws for regulating and suppressing such nuisances, and there is every reason for supposing that full advantage will be taken of the clauses in the act relating thereto."

SANITATION AT THE FAIR.

IN CONSIDERING the make-up of the medical corps for the Pan-American Exposition, the directors should carefully consider the appointment of a sanitary officer, whose duty it shall be to make as many daily inspections as he and the medical director deem necessary. Sanitary inspection means much. It means everything, and the man selected for this work will have a most responsible and most arduous position to fill. That being the case, he should be a man unquestionably fitted for the work, by reason of long experience in sanitary matters, and be thoroughly familiar with preventive medicine.

It is no reflection on the Pan-American officials to say they are not competent to make the appointment off-hand. The qualifications for the work to be done by the sanitary officer are peculiar, and because it is impossible for the laity to be thoroughly conversant with the scientific aspects of such an officer's duties the directors cannot be expected to make the best selection. This being so the JOURNAL would suggest that the selection be left to the Health Commissioner

of Buffalo, Dr. Ernest Wende; that the city be requested to furnish a sanitary officer, and that the services of one of Dr. Wende's assistants in the work of the Health Department be given to the exposition by the city. The preliminary work would require only a portion of this officer's time, and would not materially interfere with his duty in the Health Department, it being largely of a consulting character. Then when the gates of the exposition were thrown open, the city could give him a leave of absence, and he would then be free to accept a salary from the exposition for the constant attention to sanitary matters, which safety would require. As a matter of self-protection it seems to the JOURNAL that the city would be willing to permit one of the Health Department staff to devote a portion of his time to the preliminary sanitary work.

THE GIVING OF DEATH CERTIFICATES.

THE recent case of the death of the Gillespie child, on Milsom street, has more than ever drawn their attention to the slipshod method of passing out death certificates in the coroner's office. Briefly, the facts are these: The child was eight months old, and died in the early morning hours without medical attendance. The parents had sent for a neighbor, a reported christian scientist, a Mrs. Hager, who is not, however, named as a healer in the official list of Buffalo scientists. After the child died a near-by physician, who had been sent for, arrived and gave a death certificate, naming convulsions as the cause.

This curiosity was passed by the coroner's office, but rejected by the Health Department, as insufficient and incomplete. Then Coroner Kenney, at the request of Health Commissioner Wende, ordered an autopsy, which was performed. There was found evidences of beginning congestion of the lungs, there was injection of the cerebral vessels, and the intestines were filled with feces.

The post mortem examiner made his report to the coroner, but the latter declined to make any investigation. Dr. Wende, on the contrary, sent out and made his own investigation in his own way and whether or not he achieves results matters little in this particular case; the fact remains that he is doing his duty as a public official, which is in strong contrast to the laxity or indifference at first manifested by the coroner.

The alleged christian science phase of this case is not its worst feature by any means. While we are fighting the great army of

fakirs who practice medicine as christian scientists, faith curists, voodoo doctors, leg-pullers, clairvoyants, charm-workers, bone-throwers, snake-skinners and what-nots, we should not lose sight of the fact that these charlatans would not be able to cover up their mal-practice, were it not that some regularly licensed and registered physician called after death usually gives a certificate.

The stamping out of these practices would be a comparatively easy matter, were it made obligatory on physicians to report to the Health Department all cases on which they had not been in attendance at least twenty-four hours before death.

The JOURNAL suggests that the report be made to the Health Department, because that office can be trusted to protect the community against evils that are threatening.

HEAD OR FIGUREHEAD?

UNDER the above caption *Pediatrics*, of the issue of September 15th, advances an idea in connection with the christian science agitation which is worthy of serious consideration. The well-known fact that the christian science publishing firm, in Boston, has taken in over a million dollars for the seeress' books alone, tends to give color to *Pediatrics'* idea. The editorial is as follows :

It is conceivable that a devout christian woman, with a belief in the divine origin of her "mission," might found a religious sect; and that, in common with many other religious sects, seeming miracles of healing might be wrought through the faith of the believers. When, however, the visible head of a sect of this sort exhibits a financial ability suggestive of the manipulation of a syndicate of professional capitalists, the casual observer may well stand aghast at the prodigy of such a combination of saint and plutocrat. It is true that devoutness and dollar-getting are not incompatible, but adequate business training has always been a necessary requirement for the accumulation of millions; and in the absence of such a preparation the casual observer ought to be pardoned for imagining that the "head" of the new sect could be no more than a mere figurehead for a number of shrewd money-getting men. We do not, in this connection, refer to the fees charged by "healers." For if the ministrations of these functionaries are really a part of the offices of the church, it is as consistent to accept fees for healing as it would be in the case of weddings and other ceremonies, provided their operations are restricted to members of their own faith. We refer to the financial ability which can divert into coffers of the promoters a million (?) dollars obtained from the sale of a book published at nominal cost; and of a corresponding sum, perhaps, obtained from the sale of souvenir spoons; to say nothing of the thousands received

annually from tuition fees, revenues from magazines, etc. Certain capitalists "like" medicine as an investment. Modern financiering is a game of grabbing the profits of others. Vast profits are derived from the sale of proprietary remedies, and from the legitimate trade in drugs. What a grand scheme to persuade people that all drugs are useless and injurious, and then to further persuade them to buy our books and mascot spoons, and to pay preposterous fees for a few weeks' instruction in science healing! Of late years the woman figurehead has done good service for medical capitalists. There is the mythical Mrs. Pinkham, for example; and there are a half dozen women figureheads for alleged cosmetic and hygienic remedies. Capitalists unblushingly hire a good-looking woman in her twenties to tell other women that she is forty years old and keeps young by using the many high-priced cosmetics which bear her name. Advertising does the rest. The ostensible head of the scientists similarly tells her following how to be healthy and wise. It is far from unlikely that a few years hence, when the christian science fad shall have been superseded by newer medical fads, the fact will come to light that this head of the scientists has been either the dupe or confederate of one or more shrewd capitalists.

THE memorial address upon the life and character of Lawson Tait, by Dr. Charles A. L. Reed, of Cincinnati, delivered at the recent meeting of the American Association of Obstetricians and Gynecologists, at Indianapolis, was an effort every way worthy of the occasion. Rarely has so appropriate a tribute been offered to the memory of a distinguished medical man, and the memorialist, who was at his best in voice and manner, did himself and his profession great credit in the address, which abounded in ornate and graceful rhetoric, in scholarly finish, and in historic accuracy. It is most interesting reading, but it should have been heard to be fully appreciated.

SUCH familiar and versatile literateurs as "Medico," "Æsculapius," "M.D.," etc., have started in to appoint the medical corps of the Pan-American Exposition through the medium of the daily newspaper correspondent's column.

JUDGING by the delay and inactivity of the Board of Aldermen in christian science matters, it would appear to the casual observer that some of the witch doctors had managed to land a "spell" in the ordinance committee room.

PERSONAL.

DR. T. B. CARPENTER, of Buffalo, announces his removal to 142 North Pearl Street.

DR. JOHN W. CAMERON, has lately joined the ranks of Buffalo physicians. His office is at 159 Woodlawn Avenue. Dr. Cameron is a brother of Dr. J. C. Cameron, professor of obstetrics and diseases of children in McGill University.

DR. CHARLES P. NOBLE announces his removal to 1509 Locust Street, Philadelphia. Consultation hours, daily, 2.30 to 3.30 p. m. Tuesday and Friday, 8 to 11 a. m.

DR. CARLTON R. JEWETT, of Buffalo, who has been touring in Europe during a portion of the summer returned September 26th and resumed his professional work.

DR. NELSON W. WILSON, of Buffalo, has been reappointed acting assistant Surgeon U. S. Army, and assigned to duty at Fort Porter. He has also been designated as examiner of recruits at Buffalo. This appointment is a fitting recognition of Dr. Wilson's services last year in a similar capacity.

DR. HERBERT MICKLE, of Buffalo, who has been quite ill during the summer has fully recovered and has resumed his practice.

DR. EDWARD J. MEYER, of Buffalo, who recently underwent a severe operation at the General Hospital is reported to be on the road to recovery.

DR. HERMAN MYNTER sailed for home on September 26th on the Kaiser Wilhelm der Grosse, and is expected in Buffalo on October 4th.

DR. ALVIN A HUBBELL, of our associate staff, has just returned from an extended European trip.

SOCIETY MEETINGS.

THE American Microscopical Society held its twenty-second annual meeting at Columbus, O., August 17-19, 1899. In point of members present, quality of papers presented and discussed, and good fellowship prevailing among the members, the third Columbus meeting may rank as one of the most successful in the history of the society. Among the papers read especial mention may be made of those by Dr. R. H. Ward, Troy, N. Y., the first president of the society, 1878 to 1880; Professor Simon H. Gage, of Cornell University; Professor H. B. Ward and C. E. Bessey, of the University of Nebraska; C. H. Eigenmann, of the University of Indiana; A. M. Bleile, of the University of Ohio; Dr. A. M. Latham, of Chicago; J. C. Smith, of New Orleans; Dr. A. G. Field, of Des Moines, Ia.; Dr. M. A. Veeder, of Lyons, N. Y., and others.

The presidential address was delivered by Dr. William C. Krauss, of Buffalo, N. Y., on Some medico-legal aspects of diseased cerebral arteries, a portion of which is published on page 159 of the JOURNAL.

The society was handsomely entertained at the residence of Mr. J. F. Stone, on Friday, August 18th, with an imaginary trip to the grand cañons of the Colorado, illustrated with numerous stereopticon views, made, from photographs by Mr. Stone during a visit to that region.

The next meeting of the society will be held conjointly with the American Association for the Advancement of Science, in New York City in 1900. The 1901 meeting will undoubtedly be held in Buffalo.

The officers elected at the Columbus meeting are: President, Prof. A. M. Bleile, of Columbus, O.; vice-president, Dr. M. A. Veeder, of Lyons, N. Y.; treasurer, Mr. J. C. Smith, of New Orleans, La.; secretary, Prof. Henry B. Ward, of Lincoln, Neb.; executive committee, Dr. J. M. Lamb, Washington, D. C.; Dr. A. T. Kerr, Buffalo, N. Y.

THE Medical Association of Central New York will hold its thirty-second annual meeting at Syracuse, N. Y., Tuesday, October 17, 1899, beginning at 10 o'clock in the forenoon. The meetings of this association are second in importance and interest only to the state society and association, and generally attract the active progressive workers of this part of the state. The program is usually a varied

and comprehensive one, interesting the general practitioner as well as the specialist. The Syracuse meeting will be an important one, as many changes to the constitution, proposed at the Auburn meeting, will be acted upon. Among such changes the two most important are the changing of the name from Medical Association of Central New York to Medical Association of Central and Western New York, and changing the date of the meeting, third Tuesday in October to the second Tuesday in October, so as not to conflict with the date of the New York State Medical Association.

Any member of a county society, which now includes all Western New York may be elected to permanent membership in the Association by acting as delegate from the county society for two years and the payment of \$2.00 initiation fee. Permanent members and delegates attending the meetings are required to pay the annual dues of \$1.00.

For the past five years the association has recorded its proceedings in a yearly volume of transactions, each permanent member being entitled to a copy. These volumes have taken a high place in the medical literature of the day and are a credit to the association.

Titles of papers to be read at the Syracuse meeting may be sent to Dr. E. L. Mooney, president, Syracuse, N. Y.; or to Dr. C. A. Vander Beek, Secretary, Rochester N. Y. The present officers of the society are: President, Dr. E. L. Mooney, Syracuse, N. Y.; vice-presidents, Dr. John Gerin, Auburn, N. Y., and A. L. Beahan, Canandaigua, N. Y.; secretary, Charles A. Vander Beek, Rochester; Treasurer, S. L. Elsner, Rochester.

THE Wyoming State Medical Society will hold its third annual meeting at Laramie, October 10-11, 1899. The following papers will be read: Medical legislation; its relation to the laity and the medical profession, R. Harvey Reed, Rock Springs; Aortic aneurisms, with report of cases and exhibition of specimens, J. N. Hall, Denver, Colo.; Clinical report of a case of fracture of the nose and upper jaw, E. Stuver, Fort Collins, Colo.; Modern business methods for the medical profession, W. A. Jolly, Rawlins; The administration of anesthetics, E. E. Levers, Almy; The report of some cases in my practice, M. A. Hughes, Salt Lake City, Utah; The disturbances of pregnancy, Charlotte Hawk, Green River; Is high altitude an etiological factor in insanity? C. H. Solier, Evans-ton; A new method of closing the internal ring in operating for inguinal hernia, Leonard Freeman, Denver, Colo.; Cerebro-spinal

Meningitis, brief report of eleven cases, I. R. Swigart, Laramie; Mountain fever, E. Stuver, Fort Collins, Colo.; The management of abortion with report of cases, John F. Leeper, Casper; The significance of spastic symptoms, Henry W. Coe, Portland, Oregon; Pelvic abscess, P. Hyrup-Pederson, Laramie; Intraligamentous growths, Thomas H. Hawkins, Denver, Col.

THE Niagara Falls Academy of Medicine held a regular meeting at the office of Dr. W. A. Scott, 610 Pine Avenue, Monday evening, September 10th. Dr. Scott read a paper on The obstetric forceps.

THE Buffalo Academy of Medicine offers the following program during the month of October:

Section on Surgery, Tuesday October 3d, (1) Sulphrenic abscess, Prescott LeBreton; (2) Early diagnosis and treatment of tumors of the breast, L. E. McC. Pomeroy.

Section on Medicine, Tuesday, October 10th, Malaria, Irving P. Lyon: discussion by Charles G. Stockton, Marshall Clinton and John D. Howland.

Section on Pathology, Tuesday, October 17th, Landry's paralysis, Dewitt H. Sherman.

Section on Obstetrics, Tuesday, October 24th, Pus in the pelvic cavity, Herman E. Hayd.

THE meetings of the Lake Erie Medical Society and of the Dunkirk and Fredonia Medical Society were held at the Hotel Gratiot, Dunkirk, on September 12, 1899. The following papers were read: Neurasthenia, Dr. Smith, Angola; Surgical knowledge of the prostate, E. J. Meyer, Buffalo; Delirium tremens, Walter H. Vosburg, Dunkirk; Diabetes, Geo. E. Ellis, Dunkirk; Valvular heart disease, H. C. Buswell, Buffalo; Surgery of the hand, MacDonald H. Moore, Fredonia; Some of the uses of electricity in medicine and surgery, Thomas Soles, Westfield.

THE Surgical Section of the Buffalo Academy of Medicine held a regular meeting at the Academy Parlors, Tuesday evening, September 5th. The paper of the evening was, The American aborigines from medical and surgical standpoint, by A. L. Benedict.

The Buffalo Academy of Medicine held its quarterly meeting at Alumni Hall, University of Buffalo, Tuesday, September 12th. The

Section of Medicine provided the following program: The medical aspects of crime, Daniel R. Brower, Chicago, Ill.

The Medical Section of the Academy of Medicine held a meeting Tuesday evening, September 19th. Dr. George M. Gould, of Philadelphia, editor of the *Philadelphia Medical Journal*, read a paper on Habits.

THE Association of Military Surgeons of the United States held its annual meeting at Kansas City, Mo., September 27-29, 1899. The following order shows the detail of delegates from the National Guard of New York.

GENERAL HEADQUARTERS, STATE OF NEW YORK,)
 ADJUTANT GENERAL'S OFFICE,)
 ALBANY, September 7, 1899. }

MAJOR ALBERT H. BRIGGS,

Surgeon 65th Regiment, Buffalo, N. Y.

Dear Sir—I have the honor to inform you that with the approval of the Governor, the following officers of the National Guard have been nominated as delegates to represent the State of New York at the next meeting of the Association of Military Surgeons of the United States, to be held in Kansas City, Missouri, on September 27, 28 and 29, 1899 :

Colonel Nelson H. Henry, Surgeon, National Guard.

Lieut.-Col. Walter E. Lambert, Surgeon 1st Brigade.

Lieut.-Col. George R. Fowler, Surgeon 2d Brigade.

Lieut.-Col. Herman Bendell, Surgeon 3d Brigade.

Lieut.-Col. Floyd S. Crego, Surgeon 4th Brigade.

Major Albert H. Briggs, Surgeon 65th Regiment.

Major Edward T. Marsh, Surgeon 71st Regiment.

Major Bennett S. Beach, Surgeon 22d Regiment.

Major Frederick J. J. Wood, Surgeon 47th Regiment.

These names have been forwarded to Colonel J. D. Griffith, president of the association, with whom you will please communicate.

Respectfully,

AVERY D. ANDREWS, Adjutant General.

THE American Association of Obstetricians and Gynecologists held its twelfth annual meeting at Indianapolis, September 19-21, 1899, under the presidency of Dr. Edward J. Ill, of Newark, N. J. It was an enthusiastic and instructive meeting and from every viewpoint must be regarded as a conspicuous success.

The weather was propitious, the attendance was large, the papers excellent, the debates spirited, and the work done was most satisfactory. The committee of arrangements, Dr. L. H. Dunning, chairman, provided most satisfactory for the comfort and convenience of members and visitors and this contributed largely to the general result.

The medical profession of Indiana is strong and was out in large numbers at the sessions. The Medical Association of Marion County, gave a delightful reception at the German House, on Tuesday evening, and the annual dinner was held at the Denison House, on Wednesday evening, these comprising the social features of the meeting.

Professor W. Japp Sinclair, of Manchester, Eng., attended the meetings and the entertainments and made a fine speech at the dinner. Professor Thaddeus Reamy, of Cincinnati, was also a guest of the Association, participating in all the events. His speech at the dinner was especially a happy effort, and his tribute to the work done by the association was appreciated by all present.

The next meeting will be held at Louisville, September 18-20, 1900. The following-named officers were elected for the ensuing year: President, R. B. Hall, Cincinnati; vice-presidents, L. H. Dunning, Indianapolis, and T. J. Crofford, of Memphis; secretary, William Warren Potter, Buffalo; treasurer, X. O. Werder, Pittsburg; executive council (to fill vacancies), A. Vander Veer, Albany, and L. S. McMurtry, Louisville.

THE next meeting of the Esculapian Club will be held at the residence of Dr. C. J. Carr, Fillmore Avenue and Genesee Street, Thursday evening, October 19th. The paper of the evening will be read by Dr. F. S. Hoffman.

COLLEGE AND HOSPITAL NOTES.

OPENING OF THE UNIVERSITY OF BUFFALO.

THE Medical Department of the University of Buffalo was opened for the session of 1899-1900 on Monday evening, September 25th, with the usual ceremonies. A noticeable feature of the gathering in Alumni Hall was the wearing of cap and gown by the Faculty and staff of instructors. The opening address was delivered by Dr. William H. Heath, whose remarks were especially appropriate, being

directed to the students. Dr. Heath's address was largely epigrammatical and was exceptionally interesting. Some of the extracts from the address, which will be published in full in the next issue of the JOURNAL are as follows :

"Abernethy, the great surgeon, said, in his first lecture before an unusually large class : "Good God, what is to become of you?" It is not a question of what will become of you, but what may not become of you."

"Medicine is today in a more transitional state than ever before. New light is being thrown upon old phenomena; new ones discovered, and from the most unexpected quarters. Empiricism is disappearing and the art is fully established upon a scientific basis."

"Much of the just criticism upon our profession in the past which was in no small measure due to ourselves, has been corrected, by raising the preliminary educational requirements."

"It was once said that every French soldier carried a field marshal's baton in his knapsack. You may not be field marshals, but the same dispositions may lead you to fame and fortune."

"No one should attempt to enter upon the study of medicine without a suitable preliminary education. As well attempt to build a palace of stone on a foundation of mud and straw."

"Public and patient expect the doctor to be more than a medicine man; more than a detective to detect pathological changes in him; more than an accountant to strike a balance, to diagnose between his statement and his condition."

"No one should commence the study of medicine who is light-headed, flippant or superficial. It is a dignified calling demanding dignity. It is serious because it brings you into the heart of a family's suffering and into the shadow of death; more than the priesthood, more than any other profession."

"A level head and a judicious mind are necessary. While advantageous in all things, they are particularly so in medicine, so often the stalking ground of fads and isms, and because a scratch too much of a pencil, or a cut too deep with a knife, may poison a child or bring one nearer to death's door."

"A doctor must be many-sided. He must treat people as well as their ailments."

"Cultivate the social as well as the studious side of life. To abstain from society and be a bookworm is a mistake. Bookworms are rarely good doctors."

"Some men are so engrossed with work that they cannot take a

holiday or even enjoy one. Instead of spending their declining years in well-earned leisure they break up and die for want of something to do. Some one once said that man spends one-half of his life learning how to make himself miserable the other half."

"A specialist should know everything known about something; and something about everything else. Too often he knows something about something and nothing about anything else."

"Cavities have a natural charm for the specialist and gradually his view of life and disease is limited and grows as narrow as the orifice to the particular cavity."

"Remember, that the question for you to decide is not what sort of a career is medicine, but what sort of a man you are for medicine."

"One of a physician's first duties is to collect his fees. The sick man pays best while the tears are yet wet in his eyes."

"There are two kinds of success in medicine, the scientific and the commercial or professional. It does not come to us all through lack of taste or means to become scientists. Those who endeavor to achieve professional success must look beyond the financial part. Medical fortunes are rare. Wilson probably left the largest; he left over three millions of dollars. Gull left three hundred thousand. They left the two largest fortunes in England. In this country few medical men have left large fortunes as the result of medical practice, and those who have, have combined commercial success or business sagacity with their other qualities. Many physicians with large incomes and small business tact die poor, where others with small incomes and large business tact have by successful collection and judicious investment left their family in comparative affluence."

"The abuse of medical charities is a feature you will have to contend with. The managers of these institutions in conformity with the spirit of the age, wish to make records, and benevolence is no exception. Their way of expressing this feature is by the showing as to the numbers which they treat. This is a mistake. The best exemplification of progress and advance should be formed, not by its patronage, but by the character of its staff, the quality of the work done there, and especially the carefulness with which it investigates its patrons as to their ability."

"The department habit of mind is always narrowing and tends to foster sometimes ridiculous extremes and impair the power of forming by conception. As an illustration, *The Twentieth Century Practice of Medicine* has just been published and is written by as many doctors as there are subjects. The nose, for instance, is handed to

an eminent authority in London, but lest the weight of it should be detracting, the nasal pharynx they sent to France, while the larynx is brought over to North America, leaving the trachea and bronchi behind, which, being considered common place, have been sent to Scotland, while the remainder of the respiratory system of the lungs has been sent to South America, handicapped, however, that it should not be considered in relation to contagious diseases; and the accessory sinuses and the bacteriological features are further distributed, one to San Francisco and the other to a Japanese student sojourning in Russia."

"The medical curriculum will look to you very formidable and almost discouraging. If discouraged think of the dial and the pendulum who were discussing matters in general, when the pendulum stopped swinging, appalled at the work before him for a year. 'It is not the stroke that I complain of,' said the pendulum, I could manage it without much fatigue, but think of the millions that I will have to do in the year.' 'Very good,' replied the face. 'But recollect that though you are thinking of a million, you are required to perform but one at a time. And that a moment will be given you to swing in.' No matter how large the curriculum, you will take it piece-meal."

"Everything comes, it is said, to him who waits. This should be corrected to 'him who knows how to wait, or hustles while he waits.' Waiting is a part of destiny. Generals do not go into battle until the opportune moment. Why should not you wait, with the world before you? Waiting is not idleness and need not be wasted. There is a time when you can exercise your duty and keep your mind and body in a state of preparation for events that follow."

The Medical Department will be largely attended this year.

DR. J. ACKERMAN COLES, of Newark, N. J., has made the following tender to the trustees of Jefferson College in honor of the memory of his father the late Abraham Coles, A.M., M.D., Ph. D., LL.D. (Jefferson, 1835): A Carrera marble portrait bust of William Harvey, the discoverer of the circulation of the blood. This bust and its pedestal were executed at Rome, Italy, in 1869, by the distinguished sculptor, Horatio Stone. These, with "The works of William Harvey, M. D., Physician to the King, Professor of Anatomy and Surgery to the College of Physicians, translated from the Latin, with a Life of the Author, by Robert Willis, M. D., printed for the Sydenham Society, London, 1847, I, as executor of the estate

of my father, herewith proffer as gifts to Jefferson Medical College in recognition of the love and high regard he always entertained for his alma mater, its board of trustees, faculty and alumni. To these gifts I have added at the courteous suggestion of Professor J. W. Holland, M. D., a bronze medallion life-size portrait of Abraham Coles, the excellent work of the well-known sculptor, C. Conrads, of Hartford, Conn., and as further evidence of my interest in Jefferson an imported life-size bronze copy of the celebrated Roman antique statue of the boy extracting a thorn from the sole of his foot, justly admired by all critics for its beauty and anatomical accuracy."

A new training school for nervous and backward children, the first of its kind in the world, will soon be established in Chicago. It will be called the Chicago Physiological School, and its purpose will be to provide a home and school for boys and girls who are unable to cope with normal children, owing to illness or infirmity. The school will open its doors on November 1st. Miss Mary R. Campbell, of Milwaukee, will have charge. Miss Campbell was formerly in charge of the girls' department of the Wisconsin (Chippewa Falls) Institution for Feeble Minded Children. She is the author of a number of treatises on psychology.

The institution will be affiliated with the University of Chicago. The Board of Trustees will number seven, among whom are Dr. W. R. Harper and Professor George H. Mead. The number of pupils admitted to the school will be limited. Only children under fifteen years of age will be taken, preference being given to the very young. Besides instruction, medical treatment will be provided. Dr. Nicholas Senn will be invited to become a trustee.

DR. LILLIAN C. RANDALL announces the removal of Riverside Hospital from 306 Lafayette Avenue, to the new building, corner of Lafayette and Barton Streets, Buffalo. The structure now occupied is well adapted to the needs of the hospital, and the location is desirable. The continued prosperity of the hospital seems assured.

ST. VINCENT'S HOSPITAL, New York, is the first hospital to adopt the automobile ambulance. It is announced that the hospital is about to receive a gift of one of these ambulances, propelled by electricity.

Book Reviews.

THE HYGIENE OF TRANSMISSIBLE DISEASES: Their Causation, Modes of Dis-semination and Methods of Prevention. By A. C. ABBOTT, M. D., Professor of Hygiene and Director of the Laboratory of Hygiene, University of Pennsylvania. Octavo volume of 311 pages. Illustrated. Philadelphia: W. B. Saunders, Publisher.

In an address delivered before the Medical and Chirurgical Faculty of Maryland, at the celebration of the centennial anniversary of its foundation, April 26, 1899, Dr. W. W. Keen, of Philadelphia, said that "public hygiene or sanitation has been a very large element in arresting the ravages of disease which in former times swept over entire nations, and even continents; and it is a source of pride to us that among the foremost sanitarians in every community are the doctors. It is a very striking fact that diseases which once assumed the form of veritable pestilences are now, at least in civilised countries, almost unheard of; and others, though they have not yet disappeared, have had their fangs drawn, so that the public suffers far less than it formerly did. If the voice of the profession were heeded, even the diseases which have been largely abated would almost, if not entirely disappear."

The importance of public hygiene at the present time and of popular teaching of this subject in our medical colleges is becoming apparent to every careful observer who has watched the ravages of transmissible diseases for the past ten years. The bubonic plague in India, the cholera epidemic in Hamburg and the lesser epidemics of yellow fever, small-pox and typhoid fever in our own country have put physicians and hygienists on their guard and the opening sentences of Professor Keen's address are not inappropriately quoted in calling attention to Dr. Abbott's timely work on this subject. Preventive medicine is doomed to be the great study of the coming century, not to the physician alone, but every intelligent man, for his own personal welfare as well as that of the community, should be familiar with sanitary laws, especially those concerning the causation and spread of disease and the means of prevention. He should be familiar with the modes of infection the methods of disinfection, the means for the isolation of the sick, and the general rules for the management of contagious disease.

This important and necessary information the present volume seeks to supply. It is not the purpose of the book to present a complete survey of the entire field of hygiene; but it deals with just that practical portion of the subject which is of vital interest to every intelligent man, be he physician or layman, who has at heart his own best interests as well as those of the community of which he forms a part.

The author in the introductory chapter discusses the predisposing and exciting causes of disease, such as age, sex, race, occupation, heredity, season, density of population, and such exciting causes as

malnutrition, malformation, other defects of metabolism and physiological function, excessive heat, cold, moisture and bacteria. The postulates of Koch's demonstrating a causal relation between a given bacterial species and disease is given an important place in this chapter.

This chapter is supplied with various interesting charts, showing by months the average relative proportions of deaths from diphtheria and scarlatina in Philadelphia; the seasonal variation in the occurrence of typhoid fever and of malarial fever; the monthly fluctuations of diarrheal troubles, also the death-rates from diseases of the respiratory system in New York City.

Section II. is devoted to transmissible diseases, giving a summary of points that are of importance to the hygienist, such as the causation, modes of dissemination, portals of infection, prophylaxis against, and the geographical distribution of such diseases. Under this head are discussed typhoid fever, Asiatic cholera, amebic dysentery, tuberculosis, diphtheria, influenza, bubonic plague, leprosy, lock-jaw, anthrax, glanders, actinomycosis, small-pox, measles, varicella, scarlet fever, whooping cough, mumps, malarial fever, dengue, typhus and relapsing fevers, rabies and diseases due to animal parasites. These chapters are of vital interest to physicians and are interspersed with valuable data regarding various outbreaks, especially the cholera outbreak in Hamburg and Altona and the recent epidemic of bubonic plague in Hong Kong. On the subject of medical examination of prostitutes, the author shows that in the various countries where the contagious diseases act is in operation the percentage of syphilis among women has materially decreased. The author speaks very forcibly on this point, advocating inspection as follows: "To many it may appear improper to advocate a method by which the community acknowledges and openly licenses a practice that is plainly a breach of public morals. But the evil exists; it is likely to exist and nothing is gained, on the contrary much is lost, by calmly closing the eyes to it."

Section III is devoted to prophylaxis in general against infectious diseases, including vital, chemical and physical processes, the management of contagious diseases and quarantine. In this chapter the author discusses immunity, natural and acquired, the practice of vaccination and protective inoculation and the evolution of our knowledge of the antitoxic condition. Regarding antitoxin in general the author says (page 248): "In the present state of our knowledge it is impossible to say to what extent acquired immunity in human beings is due to the presence of antitoxic substances in the circulating fluids, or to indicate in how far the observations that have been made upon tetanus and diphtheria are applicable to other infections; certainly in so far as the truly toxic infections are concerned, one is constrained to feel sanguine as to the ultimate outcome of the further application of the principles on which the antitoxic method of treatment is based."

Under the chemical prophylactic measures the author gives the

essentials of a useful and a trustworthy disinfectant: (1) It shall be a germicide, *i. e.*, it shall possess the property of destroying bacteria and their spores; (2) It should be so constituted that its germicidal properties are not destroyed by the extraneous matters in which the infective microorganisms that are to be killed are to be located; (3) With ordinary care it should not be dangerous—directly poisonous—to those who are to use it; (4) It should if possible be without disagreeable odor; it should be cheap in price, easy to manipulate and for particular purposes should not cause permanent stains or be destructive to the skin, to fabrics, or to other articles on which it is employed.

The author describes the various agents used as disinfectants, giving preference to formalin, to which 10 per cent. of glycerin has been added and through the employment of a generator, similar to the Novy-Waite apparatus, the gas is disengaged by heat and conveyed through a tube into the room to be disinfected. The disagreeable and irritating odors of the formaldehyde may be removed by sprinkling the room with ammonia water.

The disinfection of water-closets, urinals and sinks, stables and cellars, wells and cisterns are then taken up separately and specifically considered.

Welch's and Fürbringer's methods of disinfecting the hands as developed at the Johns Hopkins Hospital are given in full. The author then discusses the physical processes of disinfection, as through heat, desiccation, sunlight, electricity and mechanical agitation.

The closing chapters are devoted to isolation, the care of the sick-room, clothing, excreta, utensils, attendants, the care of the body after death and a careful consideration of quarantine.

On the whole, apart from its scientific value, the book is highly interesting and entertaining. The meaning of the charts is shown at a glance and the photomicrographs well executed. The publishers have done their work admirably.

W. C. K.

MT. SINAI HOSPITAL REPORTS. Volume I. 1898. Edited for the medical board by PAUL F. MUNDÉ, M. D., L.L. D. 1899.

Although Mount Sinai Hospital has existed since 1856 and the number of patients have increased annually from 200 to 3,000, the vast material has been thus far insufficiently utilised in the interest of medical science and art. Indeed very few publications based upon the experience gathered in the hospital have seen the light. At last the board of directors have granted the means for publishing an annual volume and henceforth the staff at Mount Sinai Hospital, under the able leadership of Dr. Abraham Jacobi, will be able to collate their experiences and investigations in a manner alike satisfactory and commendable. Some idea of the work done by this hospital can be gleaned by the statistics of the medical and surgical services during the year 1898.

In the medical wards there were treated 1,020 patients, of whom 494 were cured, 351 improved, 54 unimproved, and 121 died. Among the rare diseases seen here mention may be made of cases each of acromegaly, Landry's paralysis, syringomyelia and astasia abasia. Among some of the contributions of this volume mention may be made of the following. A study of the cases of typhoid fever observed in the hospital, 1883-1898, by J. Rudisch; Statistics of 500 cases of lobar pneumonia, by Alfred Meyer; Notes on some interesting results with the Widal test, by Alfred Meyer; A case of pernicious anemia with fatty heart occurring during pregnancy, by Alfred Meyer; A case of abscess of the liver which ruptured into the lung, by N. E. Brill; A case of ulcerative endocarditis involving the valve of the pulmonary artery, by N. E. Brill; Acute pancreatitis—disseminated fat necrosis of omentum and peritoneum—laparotomy—recovery, by Morris Manges; Multiple carcinosis of bones secondary to carcinoma of breast, Morris Manges; Study of a case of echinococcus cyst of the liver with discharge of daughter cysts through the common bile duct, by Henry W. Berg; Statistics from the children's department, by Barnim Scharlau; On erythromelalgia, by B. Sachs; report of the department of general surgery, by Arpad G. Gerster; Constricting adenoma of the hepatic flexure—recovery after extensive resection of the colon, by Howard Lilienthal; Statistics of the genito-urinary department, by William F. Fluhrer; three cases of prostatectomy, by William F. Fluhrer; gynecological service, by Paul F. Mündé; Vaginal celiotomy for diseases of the appendages, by J. Brettlaue; Statistics of ear and eye service, by E. Gruening; The mastoid operation in acute empyema and caries, by E. Gruening; Restoration of the conjunctival cul-de-sac in a case of total symblepharon by means of Thiersch skin grafts, by Charles H. May; Report by Carl Koller; A case of thrombo-phlebitis of the sigmoid sinus and the jugular vein, by Carl Koller; A report of a series of unusual pathologic conditions, by F. S. Mandlebaum and E. Libman; A review of the Widal tests made during 1898, with a description of the method used, by E. Libman.

These reports will take rank with the reports of the Boston General, Johns Hopkins, Brooklyn Methodist Episcopal and New York Presbyterian Hospitals, and should act as an incentive for other hospitals to do likewise. Dr. Jacobi and his staff are to be heartily congratulated.

W. C. K.

THE MINERAL WATERS OF THE UNITED STATES AND THEIR THERAPEUTIC USES. With an account of the various mineral spring localities, their advantages as health resorts. By JAMES K. CROOK, A. M., M. D., New York. New York and Philadelphia: Lea Brothers & Co. 1899.

The efficacy of water in the treatment of disease was known and practised even in the days when Rome was in her glory and down the ages without interruption have come the blessings and advantages of the most important of nature's elements. European peoples have

not failed to appreciate the immense advantages of their natural resources of this character and the most successful physicians are those who send the majority of their patients to some fashionable watering place for rest, recuperation, and the internal and external use of water. Perhaps the change of scenery, of surroundings, and of habits have much to do with the results obtained, but certain it is that patients at these spas will use water plentifully—whereas at home they hardly know the color, taste or feeling of water. Americans have lately been in the habit of going to Carlsbad, Ems, Baden Baden and other European springs, when in fact within their own borders are found the close counterparts of the best foreign springs. The absence of knowledge regarding our own springs may have been responsible for this to a certain degree and the work in question will undoubtedly do much to satisfy this want. Though several excellent volumes have been written they have become antiquated through natural causes, such as the abandonment of certain once popular spring resorts and the development of a large number of new and important spas. In the present volume more than 200 mineral spring localities are for the first time described in a book of this kind.

The author divides his work into two parts, viz.: mineral waters and their therapeutic uses and the mineral springs and wells of the United States, with the topographical and climatic features of each state and territory. In part first the author considers the question of hydriatics in general, the origin of springs and their sources of mineralisation; the classification of mineral springs; the solid and gaseous components of mineral waters; baths and douches and their medicinal use, and the therapeutics of mineral waters.

In Part II. the author gives the analyses of the different mineral springs from Maine to California and from Alaska to Florida, with their medicinal qualities. He has made use of the elaborate and well-nigh exhaustive tabulation of the American mineral springs, made for the United States geological survey, by Dr. Albert C. Peale, besides carefully examining all available literature on the subject. Moreover, letters of inquiry have been addressed to every spring resort and commercial spring and much valuable information has been gleaned by personal visits from time to time to many important localities in the different states. It is thus very evident that the author has made a most careful examination and enumeration of these waters, and to the physician in search of certain waters this volume will be of the greatest aid. The book is well printed and nicely bound.

W. C. K.

OVER 1,000 PRESCRIPTIONS OR FAVORITE FORMULÆ OF VARIOUS AUTHORS, TEACHERS AND PRACTICING PHYSICIANS. Second edition, revised and enlarged. Detroit, Mich.: The Illustrated Medical Journal Co. 1899.

This is the second edition of this handy manual, and is just from the press; it has nearly a 100 pages of new matter added. As the practical worth of this kind of a book consists in its having a handy

and complete index, this book has it, for some fifteen pages of small type are devoted to this object, and some of the lines have as many as twenty different references to as many different formulæ; this would go to show that there are about 2,000 different prescriptions given in the volume. We notice that many of the newer remedies are among the prescriptions, thus bringing the treatment of many of the diseases down to date. Both old and new writers of both home and foreign countries are represented among its formulæ.

Blank pages are frequently introduced, so that a handy place is furnished for recording any new prescriptions that one might wish to preserve. The printed index will index all such pencilled additions, if care is taken to write them opposite a page with a formula for similar disease; this would then save the bother of indexing the pencilled additions.

ATLAS OF DISEASES OF THE SKIN. Including an Epitome of Pathology and Treatment. By PROF. FRANZ MRACEK, of Vienna. Authorised Translation from the German. Edited by HENRY W. STELWAGON, Clinical Professor of Dermatology, Jefferson Medical College, Philadelphia. Philadelphia: W. B. Saunders. 1899.

This is one of the series known as Saunders's Medical Hand Atlases. The present volume contains sixty-three colored plates and thirty-nine full page half tones. The magnificent collection of lithographs constitutes the most striking feature of the work and is one which should recommend it to all who are especially interested in the lessons they convey. It is fair to say, however, that some of the half-tones are open to criticism. While the illustrations of various aspects of diseases of the skin are far from complete, nevertheless the work may be said to cover, as a whole, a field hitherto almost wholly unoccupied. The book is to be commended for the simplicity and precision with which knowledge is conveyed by means of its plates, which is next to actual experience with a living subject. The cost of the plates must have been enormous, as they are almost entirely original. The lithochromes are especially excellent, each presenting a type of the particular disease it is intended to call to mind—the representation of the texture of the skin is almost perfect.

Another important feature consists in the fact that each plate is accompanied by a condensed description of the case which it represents. A portion of the volume is devoted to pathology and the treatment of skin diseases in general. This department will be found of especial value. From the standpoint of diagnosis, brought out by text and illustration, as well as for the various simple suggestions as to treatment, little is left to be desired when the size of the volume is considered. In the discussion of the different subjects, numerous foot notes, containing the opinion of the translator, Dr. Stelwagon, furnish material help to the reader. The book is a very useful one, and we can heartily commend it as one calculated to assist in forming a correct diagnosis. The price, \$3.00, is moderate for a volume containing illustrations of such a high order.

G. W. W.

THE METHODIST-EPISCOPAL HOSPITAL REPORTS, BROOKLYN, N. Y. Volume I., 1887-1897. Edited by LEWIS STEPHEN PILCHER, M. D., and GLENTWORTH REEVE BUTLER, M. D. New York: Published by the Hospital. 1898.

The board of managers of the Methodist Episcopal Hospital, of Brooklyn, voted on January 27, 1887, to make a contract for the publication of 1,000 copies of a medical and surgical report, to be prepared in view of the tenth anniversary of the hospital and called for one physician and one surgeon from the staff to edit the same. The staff wisely selected Drs. Pilcher and Butler and the wisdom of their choice is clearly shown in the handsome volume prepared. The editors had the hearty coöperation of the attending staff and of others who have been former members of the house staff. Of course, only a small part of the material accumulated has been utilised in this volume. The affections studied have been chosen because of the degree with which they illustrate the practical application of the teachings and resources of the medical and surgical knowledge of the period, and present clearly the nature and scope of the work which the hospital is doing. Many subjects have been necessarily omitted and the authors hold out the hope that they will find full presentations in subsequent volumes, a hope that all those who have the good fortune to secure a copy of this report, will wish to see materialised.

As this is the first publication of the kind emanating from this hospital, the medical and surgical essays are preceded by an historical narrative and a description of the building, and of the administrative organisation, furnished by the administrative officers of the hospital.

Naturally, the frontispiece is a beautiful engraving of George I. Seney, to whose generosity and benevolence the hospital is due. It is a pity that more men like George I. Seney are not among us, especially at this end of the state. The buildings and grounds are well described and the different groups of buildings are shown from the different streets, enabling one to gain a good idea of the noble institution which is doing such excellent work in relieving "Jew and Gentile, protestant and catholic, heathen and infidel, all on the same terms," perpetuating the wish of its noble founder and benefactor.

The essays include the following: Surgical reports; clinical studies of the surgical diseases of the female generative organs, L. Stephen Pilcher. II. Observations upon the injuries of the cranium and of the spine, by George Ryerson Fowler. III. Clinical studies in appendicitis, by George Ryerson Fowler. IV. The cases of fracture of bones, by James P. Warbasse. V. The major amputations, by Thomas Bray Spence. VII. The skin graftings, by Henry Beeckman Delatour; The cases of tetanus, by Charles Henry Goodrich. VIII. The anæsthesisations, by Henry Goodwin Webster. IX. Traumatic ruptures of the abdominal viscera, by William Nathan Belcher. X. Surgical operating-room arrangements and methods, by Lewis Stephen Pilcher.

Medical reports: I. The case of typhoid fever, by Alexander Ross Matheson. II. A case of Gilles de la Tourette's disease, by

Alexander Ross Matheson. III. Notes and clinical reports on some pleural and pulmonary conditions, by Glentworth Reeve Butler. IV. The cases of aneurism occurring in the medical service, by William Nathan Belcher. V. The cases of acute (non-alcoholic) poisoning, by Ralph Melville Mead. VI. The cases of uterine fever and heat prostration, by Frank Whitfield Shaw. VII. The cases of diseases of the lungs, bronchi and pleura, by Frank Whitfield Shaw. VIII. The cases of diseases of the liver, by Arthur Henry Bogart. IX. The cases of gastro-intestinal disease, by Charles Richard Butler. X. The cases of nephritis, by Henry Goodwin Webster. XI. The cases of rheumatism, by Raymond Clark. XII. The cases of pregnancy, by Henry Pelouze de Forest. Pediatric reports: I. Empyema of the thorax in children by John Bion Bogart.

Many of the papers are handsomely illustrated, especially Dr. Pilcher's on the surgical diseases of the female generative organs; Dr. Fowler's on clinical studies in appendicitis; Dr. Warbasse on fractures and Dr. Belcher's on traumatic ruptures of the abdominal viscera. It would be impossible to speak of the excellency of all the papers; they are all interesting and scientifically presented and must be of some worth in order to have passed through such able editorial censorship of Drs. Pilcher and Butler.

W. C. K.

A COMPEND OF HUMAN PHYSIOLOGY. Especially adapted for the Use of Medical Students. Quiz Compend, No. 4. By ALBERT P. BRUBAKER, A. M., M. D., Adjunct Professor of Physiology and Hygiene in the Jefferson Medical College; Professor of Physiology in the Pennsylvania College of Dental Surgery, etc., etc. Ninth edition, with new illustrations. Philadelphia: P. Blakiston's Son & Co. 1899.

This volume belongs in the well known series of quiz compends, published by Blakiston. It is not written in form of question and answer, as some other of the series are—a style which seems to the reviewer decidedly objectionable. This edition has been revised and enlarged and will doubtless continue in favor with a large number of medical students.

M. J. F.

THE DISEASES OF THE NERVOUS SYSTEM. A Text-Book for Physicians and Students. By DR. LUDWIG HIRT, Professor of the University of Breslau. Second American edition, revised from the second German edition by August Hoch, M. D., assisted by Frank R. Smith, A. M. (Cantab.), M. D., Assistant Physicians to the Johns Hopkins Hospital. With an Introduction by William Osler, M. D., F. R. C. P., Professor of Medicine in the Johns Hopkins University. Octavo, with 178 illustrations. Sold only by subscription. New York: D. Appleton & Co. 1899.

The distinct value to the American physician of this work lies in the fact that he sees the suggestion presented from a different point of view.

American neurologists have their theories and have proclaimed them so long that one is almost inclined to accept them as undisputable facts.

Hirt's work is a representative presentation of German neurology. In the description of diseases we find the work clear and careful.

In the acceptance of theories, such as the cause of acromegaly, being enlargement of the hypophysis. He accepts none of the

theories advanced as to the pathology of chorea. Of anterior poliomyelitis he says it is possible that infectious influences will at some time be proved to be the cause of the disease; for the present, however, this is nothing more than a hypothesis, which has not gained any firmer ground from a report of Cordier of an epidemic of the disease. Throughout the work we note the care and thoroughness of the author in weighing evidence. His extreme caution in accepting only the proven makes his volume a landmark of the present boundaries of our knowledge in this field. J. W. P.

BOOKS RECEIVED.

Minor Surgery and Bandaging. By Henry R. Wharton, M. D., Demonstrator of Surgery in the University of Pennsylvania. New (4th) edition. In one 12mo volume of 594 pages, with 502 engravings, many being photographic. Cloth, \$3.00 net. Philadelphia and New York: Lea Brothers & Co.

Schleif's Materia Medica and Therapeutics. A Manual of Materia Medica, Therapeutics, Medical Pharmacy, Prescription Writing and Medical Latin. For the use of students and practitioners of medicine. By William Schleif, Ph. G., M. D., Instructor in Pharmacy in the University of Pennsylvania. In one very handsome 12mo volume of 352 pages. Cloth, \$1.50 net. Philadelphia and New York: Lea Brothers & Co.

Transactions of the Ohio State Medical Society. Fifty-fourth annual meeting, held at Springfield, May 10-12, 1899. Edited by P. Maxwell Foshay, M. D. Cleveland: J. B. Savage. 1899.

Transactions of the Medical Society of the State of New York, for the year 1899. Edited by Frederic C. Curtis, M. D., Secretary. Philadelphia: Wm. J. Dornan, Printer. 1899.

Transactions of the State Medical Society of Wisconsin, Vol. XXXIII., for the year 1899. Edited by Charles S. Sheldon, Secretary. Madison: Tracy Gibbs & Co. 1899.

Index-Catalogue of the Library of the Surgeon-General's Office, United States Army. Authors and subjects. Second series, Vol. IV. D—Emulsions. Prepared under the direction of the Surgeon-General by James C. Merrill, Major and Surgeon U. S. Army, Librarian Surgeon-General's Office. Washington: Government Printing Office. 1899.

Transactions of the South Carolina Medical Association. Forty-ninth annual meeting, held at Harris Lithia Springs, April 5, 6 and 7, 1899. Charleston, S. C.: The Daggett Printing Co., 151 and 153 East Bay. 1899.

Practical Anatomy. Including a Special Section on the Fundamental Principles of Anatomy. Edited by W. T. Eckley, M. D., Professor of Anatomy in the College of Physicians and Surgeons, University of Illinois; Professor of Anatomy in the Northwestern University Dental School; Professor of Anatomy in the Chicago Clinical School, and Director of the Chicago School of Anatomy and Physiology; Member of the American Medical Association, the Chicago Pathological Society, the Chicago Medical Society, etc.; and Mrs. Corinne Duford Eckley, Instructor of Anatomy in the Northwestern University Woman's Medical School; Professor of Anatomy in the Chicago School of Anatomy and Physiology. With 347 illustrations, many of which are in colors. Octavo. Price, cloth, \$3.50 net; oil cloth, \$4.00 net. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1899.

A Compend of the Diseases of the Eye and Refraction. Including treatment and surgery. By George M. Gould, A. M., M. D., and Walter L. Pyle, A. M., M. D. Second edition, revised and enlarged; 109 illustrations, several in colors. Quiz Compend No. 8. Philadelphia: P. Blakiston's Son & Co. 1899.

The Johns Hopkins Hospital Reports. Volume VII., Nos. 5-6-7-8-9. Hernia. By Joseph C. Bloodgood, M. D. Baltimore: The Johns Hopkins Press. 1899.

Eighteenth Annual Report of the State Board of Health of New York, for the year 1897. Transmitted to the legislature, February 15, 1898. In two volumes. Albany: Wynkoop-Hallenbeck-Crawford Co. 1898.

A Compend of the Practice of Medicine. By Daniel E. Hughes, M. D., Chief Resident Physician Philadelphia Hospital; Physician in-Chief Insane Department, Philadelphia Hospital, etc. Sixth physicians' edition, thoroughly revised and enlarged, including a section on mental diseases and a very complete section on skin diseases. Philadelphia: P. Blakiston's Son & Co. 1899.

A Treatise on Surgery, by American Authors. Edited by Roswell Park, M. D., Professor of Surgery in the University of Buffalo, N. Y. New condensed edition in one royal octavo volume of 1262 pages, with 625 engravings and thirty-seven full-page plates in colors and monochrome. Cloth, \$6.00 net; leather, \$7.00 net. Philadelphia and New York: Lea Brothers and Co.

Coakley on the Nose and Throat. The Diagnosis and Treatment of Diseases of the Nose, Throat, Naso-Pharynx and Trachea. For the use of students and practitioners. By Cornelius G. Coakley, M. D., Professor of Laryngology in the University and Bellevue Hospital Medical College, New York. In one handsome 12mo volume of 536 pages, with ninety-two engravings and two colored plates. Cloth, \$2.75 net. Philadelphia and New York: Lea Brothers & Co.

Kirke's Handbook of Physiology. Fifteenth American edition. Revision by Warren Coleman, M. D., Professor of Physiology in the Woman's Medical College, New York, etc., and Charles L. Dana, A. M., M. D., Professor of Nervous and Mental Diseases in the New York Post-Graduate Medical School, etc. One volume, 856 pages, 8vo. Profusely illustrated by 516 wood-engravings in black and colors, and by chromo-lithographic plate. Muslin, \$3.00 net; leather, \$3.75 net. New York: William Wood & Co.

Progressive Medicine. Volume III. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, handsomely bound in cloth, 440 pages, eleven illustrations. Philadelphia and New York: Lea Brothers and Co.

LITERARY NOTE.

THE *Texas Medical News*, one of the best medical journals in the southwest, has made great improvement of late in its appearance and make-up. It has increased its size by sixteen pages and otherwise added to its strength and influence. It is well edited, handsomely printed, and is in everyway a credit to its editors, owners and readers.

TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF NEW YORK.

A limited number of copies of the transactions of the Medical Society of the State of New York for 1899, recently issued, are available at \$1.00 each, through the secretary, Dr. F. C. Curtis, Albany, the volume being sent, prepaid, on receipt of the remittance. It contains 500 pages of timely matter, many articles being by men conspicuous in the profession. This opportunity to "obtain" good literature at a nominal price should not be lost.

BUFFALO MEDICAL JOURNAL.

VOL. XXXIX.—LV.

NOVEMBER, 1899.

No. 4.

Original Communications.

THE STUDENT IN MEDICINE.¹

By WILLIAM H. HEATH, M. D., Buffalo, N. Y.,

Professor of genito-urinary diseases, University of Buffalo.

AFTER accepting the duty and honor of opening the college session with the customary address, in considering the matter the sorry thought occurs to me that there is nothing very new to say, nothing that has not probably been said before and much better.

There is the usual consideration of the student, the college and, finally, the panegyric of medicine. Some question the value or necessity of the introductory address, considering it more pertinent for each chair to devote a portion of its first lecture to a presentation of the subject at large, its scope, methods of study, and the like, very much on the order of a preface of a book, a part which is too often unread.

Abernethy once said, on beholding the large class at his first lecture, "My God, what is to become of you all?" The same thought occurs to me, but modified by the changes time has brought. It is not now "what is to become of you all," but "what may not become of you." Medicine today is in a transitional state more than ever before. New light is being thrown upon old phenomena, new ones discovered, and from the most unexpected quarters. Empiricism is disappearing and the art is fairly resting upon a scientific basis.

Most of the just criticism of our profession, which in the past was in no small measure due to ourselves, has been largely corrected. The deficiency of preliminary education and faulty medical training

1. Address delivered at the opening of the Medical Department of the University of Buffalo, September 25, 1899. Reported stenographically for the JOURNAL.

have been corrected and a more careful self scrutiny of those who enter the profession has occurred. With this change and transition and advance and with the possibilities of the future you are concerned. You are all the architects of your own fortune. Work is to be done in which you can and will participate and which may lead you to the top, which is broader, though higher than ever before. It was said years ago that every French soldier carried a field marshal's baton in his knapsack. You may not be field marshals in medicine, but the same possibilities may carry you to fame and fortune. Success demands very much, the best there is in you and from the beginning. There is no royal road to, nor trusts in, learning, and though the possibilities are greater, the standard is higher, competition keener, the problems more subtle, but the rewards are proportionate. If you wish to succeed you must take the turnpike, which is hard, and trudge along the way those who have gone before you and succeeded have traveled.

It is hoped that you who are about entering this field have been influenced by proper motives, due consideration and not by the superficial appearance of attractiveness, such as independence, the appearance of authority, or ease. Either from want of knowledge of themselves, or the requirements of medicine, or proper lack of advice, unquestionably more enter this profession that are ill adapted to it than any other. If the details appear dry, the study disagreeable, parts distasteful, you are not intended for a successful doctor and stay your steps before advancing.

It would appear pertinent therefore to here refer to some of the features which observation and experience have determined to be of value upon entering this career.

No one should consider the serious study of medicine who is superficial, trivial or weak. Too many have done so. It is a dignified calling demanding dignity. Serious because it brings you into the heart of the family, in touch with suffering, and into the shadow of death; even more than the priesthood, or any profession.

No one should consider the study of medicine who has not had a suitable preliminary education. As well attempt to build a palace of stone on a foundation of mud and straw. It is necessary in the acquirement of the principles of medicine and further in life to permit the growth of other culture. The public and patients expect the doctor to be more than a medicine man, more than a detective, to detect pathological specimens, more than an accountant to strike off a balance, and diagnosticate, from one's statement, his condition.

A natural taste. This is a difficult quality to describe, though we can recognise it. It stands, however, for future enthusiasm, success and the ability to obtain and give the greatest benefits, make the greatest sacrifice, and to find in his art the essence, the something that lightens its labor and tempers the way.

Sir Benjamin Brodie says that he was generally supposed to have a particular liking for his profession, but that it was not so, and that his experience led him to have no faith in those special callings to certain ways of life which some young men are supposed to have and that those who succeed best are those who persevere, as a matter of duty or because they have nothing better to do, until they acquire knowledge and, finally, attain some degree of credit, after which everything is changed and every day they become more interested in their work.

A healthy, strong constitution. It is a trying vocation, as it often says, eat and sleep when you can, take little recreation and very much hard work. Besides, very often a large physique implies a big brain and bigger heart, qualities which are not a drug on the market.

Adaptability, particularly when accompanied by uprightness of purpose, because it engenders the right spirit, and foreshadows a philosophical mind, which may enable you to take the small things of life and walk grandly among them.

A cheerful temperament. You should be an optimist, have plenty of buoyancy and hopeful temperament, because the gloomy visaged, pessimistic, complaining or depressed manner cannot be depended upon to impart hope and buoyancy or dispel depression so often felt by the sick, as well as observed in the sick room.

A level head and judicious mind, because while advantageous in all things it is particularly so in medicine, so often the stalking ground of fads and isms, and because a scratch too much of a pencil, or cut too deep with a knife, may poison a child or bring one nearer death's door than the principles of medicine intended.

That he should be many-sided, because it goes without saying, you treat people as well as their ailments and will come in contact with all sorts, and under all kinds of circumstances. Because it will enable you to study human nature and cultivate the social as well as the studious side of life. For you to abstain from society and cultivate only a student's life, or be a bookworm is a mistake. Bookworms are rarely good doctors. A knowledge of human nature will enable you to be a boon to the sick, and be to yourself

a protection from many dangers which only come to a doctor's life ; besides it enables you to have control of your patient and maintain it ; because its usefulness has no limitations in all affairs of life.

To be resourceful and quick, because you must learn much and have your knowledge with you and adapt it to very many opposite and different wants. In this respect differing very much from the lawyer and men of the cloth. Because it is part of the art to be able "to cut your cloth to fit the man" and in study to know what to digest and what to leave out.

Character, because student life, and the practice of medicine, is full of temptations and often surrounds you with the influences of the most varied and at times of the most dangerous nature. While at college the absence of the school restraint, temptations of youths in large cities, rich idle fellow-students, make it imperative that from the beginning of your career you should be strong in yourself, cultivating the good and eschewing the evil, that the habit be so formed that when in practice the close sacred relations given you by your patients, the position your profession gives you in the community, be justified, and because without it your virtues even may be made vices.

Dress and manner both much proclaim the man. Let your dress be as any gentleman's should be, and do not attire yourself to emphasise your calling, nor should your manner be artificial, nor a veneer. Do not forget that in these times rudeness will not pass for brightness, nor brusqueness for genius. Your appearance and manner should then be temperate, as no one is so open to criticism as a physician, his appearance and behavior. They are sometimes the means of a first start in practice.

Tact. A requisite to success in this as in no other vocation. It is acquired by observation, made easy with good breeding and a level head. The whims of individuals, intensified by sickness, the peculiar and trying environments made by patients and their friends or relatives, make it a most important quality. It aids in getting a practice, keeping it and warding off much unpleasantness. It should be cultivated, but not to the extent as to be hypocrisy, which would only hold you up to ridicule, and deserved remark. It should be varied as the conditions which it is intended for.

Hoping you already possess or will cultivate most of these qualifications, and that, not like the tramp, you will not feel "that advice is but the one thing in the world you have a sufficiency of," let me refer further to some of the features which you will be confronted with later on in your medical life.

The proper study of mankind is man. He it is we are concerned with. He is the material upon which we are to exercise our craft. Therefore, there is nothing which concerns him, which a medical man will not be the better for knowing. Each case that we come across is a case of a disease and a man. The disease element is provided for by the curriculum; the man or personal element can only be learned by experience. Therefore a medical man should be a man of the world. Do not let the sharp interest in medicine prevent you from widening your general knowledge in every way. You should keep up general reading, take an interest in all that is going on in the world, and lose no opportunity to add to your general knowledge. In your everyday work you will be brought into contact with every player on the stage of life. And if you would enter into the spirit of its action, you yourself must be a man of many parts. These remarks may seem premature, but it is just when the student's mind first becomes engrossed with many subjects, as in the medical college, that there is the greatest danger of general knowledge and the love of culture being neglected or lost. Again, though it is true that the earnest worker finds the most happiness in his own work, it is none the less true that much happiness, profit and relaxation can be acquired from outside interests. Hard work with no hobby is like a boiler without a safety valve. It is liable to burst. Some men are so engrossed with work that they cannot take a holiday, or even enjoy one, and should they in due time be able to retire, instead of spending their declining years in well-earned leisure, they break up and die for the want of really something to do.

Someone once said that "man spends one-half his life learning how to make himself miserable the other half."

The course of study resolves itself into two periods: first, that concerned in the study of the structure and functions of the healthy human body, and such subjects and sciences as elucidate them; and, second, in the study of disease of all aspects.

The importance of thoroughness and method in your earlier years cannot be exaggerated. They possess a double value. Not only are they indispensable to the student, but in the profession they afford an invaluable training of powers of observation, and a means of acquiring a scientific habit of mind. They have, therefore, both a technical and a general educational value. Of your early studies anatomy and physiology demand the most thorough and painstaking work. I speak of these because they are the foundation of medicine and what applies to them applies to all. Frequently the student will

find himself confronted with matters in them for which he cannot see the remotest possibility of any particular application. None the less on this account must he endeavor to master them, for who, indeed, can pick out the smallest fact in these studies which is necessarily devoid of all practical importance or may become so in anatomy.

Above all, he should not neglect practical work in the dissecting room. The thorough knowledge of anatomy, which will prove of inestimable value to him, cannot be rightly learned by reading, which in comparison is a sham. He may know every artery and vein, be able to draw the most difficult region on the blackboard with his eyes shut, yet fail to recognise even the most important structures he has read of when he meets them in the right, but unusual to him, place, the body. He may (and we are familiar with him) pack and cram himself full with extracts and formulæ in a few weeks to try to represent a year's work, he may pass his examinations, but it will disappear as quickly as it came and need not be mourned, for from a practical view it is valueless. Too strong a plea, therefore, cannot be made for individual and practical work, and particularly in anatomy. The medical curriculum may appear crowded, perhaps over-crowded and will look to you very formidable and almost discouraging. If discouraged, think of the fable of the dial and the pendulum who were discussing matters in general, when the pendulum stopped swinging, appalled at the work before him for a year, said "it is not the stroke that I complain of, I could manage it without much fatigue, but think of the millions I will have swung in the year." "Very good," replied the dial, "but recollect that, though you are thinking of the million, you are only required to perform but one swing at a time, and that a moment will be given you to swing in." No matter how large the curriculum, you will only take it piecemeal.

A grave error into which the medical student often falls, and is likely to, is the getting of only enough knowledge to pass an examination successfully. Examinations are a necessary evil, for it is only by their means it is possible to learn, though imperfectly, that a student has acquired a sufficient degree of learning to entitle him to official permission to practice. Some such qualifications must be had; the public which place their lives in our hands, the state which entrusts us with this responsibility, and the profession demand it. But it is disastrous for you to regard this test as the final object of study, and yet how often is not the mistake made.

The result is the same, no thoroughness or method, the work paroxysmal and punctuated by long intervals of more or less quiescence. In these circumstances the one idea is to induce the brain to assimilate for the time being the necessary store of facts which must be his, condensed and arranged, merely to be brought out in the time of need. It is a travesty of knowledge to call this education. The knowledge thus obtained lacks, among other things, perspective. Each fact stands out of all relation to its surroundings. Such knowledge cannot be called upon for practical application. Let me urge you, therefore, to look as much to the quality as to the quantity of your work. Do not crave too much specially prepared knowledge, or you will not only lose the power of teaching yourself but of applying that which you do know. Remember that knowledge which you can't use is like money you can't spend.

You may be tempted to "read some at home." This is a mistake. The great majority of students can grasp more by listening for an hour to a capable lecturer than in spending similar time on his text-books. It is proverbially easier to convey and express ideas in speech, where the individuality of teachers is a help, with his illustration and criticism in impressing the facts upon you. Lecturers can emphasise and avoid loss of point by repetition, which would not be permitted in a book, and are able to quote similes and illustrations which would appear trivial reduced in black and white.

Often students lose much of the chief value of the lecture by misdirected energy in note-taking. It is foolish to try and take down nearly every word and then spend the evenings in writing them out. It amounts to giving much labor in making what is practically an unrevised and imperfect book. The weak point is that he gains nothing during the lecture, except a lot of written material which when utilised has lost the personal stamp of the teacher. Proper note-taking should only include the headings of the arguments, or the facts for future reference; in this way he goes along with the teacher, and has his attention fixed, while his assimilation is not interfered with.

Students often meddle with affairs that do not concern them. Nothing is gained and much lost by a first-year student going where he cannot understand, to clinics. That desire is not much higher than the curiosity which attracts one to a street organ or an ambulance. Without understanding, the sights are meaningless tragedies, unsoftened by the real interest they will have after he comes to study, and not to gaze at them.

It may be that the matter of student's recreations, which are not provided for in the curriculum, hardly come within the scope of the occasion like this. Whatever form is adopted, let it be indulged in with some sort of method. One student thinks of nothing but his work, day in and day out, week in and week out, Saturday afternoon and Sunday. It is work, work and read medicine, no relaxation. On the other hand, there is the student who thinks of nothing but play or athletics and getting a place on the football team, perhaps thinking of combining business with pleasure in affording him an opportunity to study the first aid to the injured or become acquainted with fractures. Cultivate the habit, if you can, of throwing off all work at the time for rest, and not relegate the hard study problems to hours known as "spare moments."

In a medical school the social life of a university is absent; a man if he chooses, may never really know those he meets daily. This is undesirable. The man who keeps to himself is denying himself one of the most valuable means of preparing for his part in life.

We are more or less roughly cut stones, few diamonds, and are much improved by proper association with others of like kind.

Make friends. Emerson says, "our chief want in life is some one who can make us do what we can." This is the service of a friend. Therefore, for general and individual advantage, do all you can to promote friendship. No doubt many a medical student has gone to the wall for the want of a real friend to help him with his troubles, anxieties and fears.

To those who look forward to hospital work, much of what has been said also applies and the habit of method and thoroughness which he has cultivated, will yet prove of great value. In the hospital and dispensary, the two great faculties the student of medicine should cultivate are, first, power of accurate observation, and, second, the drawing of conclusions from facts; faculties not different from those aimed at in any form of education, general or special.

It has been said "that scientific training is not the imparting to others the results of someone's training, but in developing in each one a mind capable of making its own observations, its own conclusions." It is not so much how much you know, but how much you are able to find out for yourself. No period of your medical career will compare as training in the art of observation, as the time spent in clinics, dispensaries and hospitals. The cases you will study there will, if rightly studied and observed, lay the best foundation for your future success. One case well studied is worth a dozen

slipped over. Each case should be followed through with the utmost care and no detail, however trivial it may appear, should be passed undervalued. Each case thoroughly investigated and recorded will be indelibly fixed on the memory and serve as a standard for after comparison.

The taking of histories is probably the best of the training. It will often seem that the minuteness of details and elaboration of written reports are a waste of time. There is no greater mistake than this. The training thus obtained in the observation of symptoms and physical signs is invaluable; even if it shows your patient is sound, time spent is not wasted. You will often be asked if a patient is in a state of disease or health, and to state the facts you must leave no stone unturned. There are more mistakes in diagnosis from incomplete examination than from false deduction. The latter is excusable, though serious, the former less serious, but perchance inexcusable. In this way only can the living picture of the disease be best studied and particularly when followed by systematic reading. One whose knowledge of disease comes from books is sadly off, for it is proverbial that many of those with the greatest book stock of learning are by no means those who best know how to apply it. So, their opinion in sickness is vastly inferior to that of the man who with less quantity of knowledge has cultivated observation with study.

Remember also that as no two persons called healthy are exactly alike, neither are any two diseased ones precisely similar. Every case presents something new and will differ more or less from the standard type. So much more the necessity of cultivating and exercising observation and judgment. Again, it is often the case that the most prominent symptom, which is most complained of, is less in importance than others more obscure. For this reason also you will see the advantage of trained observation. The ideal clinical teacher is he who possesses this art in the highest degree, and can also analyze for the student and those less gifted, the steps in the process by which he arrives at his conclusions. It is useless for you, and don't try, to attempt brilliancy in such matters, for jumping at conclusions is not only useless, but creates a spirit of carelessness. It is enough for you to study his process and adapt it for your own. Only in this way will you come to have faith in your own opinion, a sound basis for conclusions, and confidence in your own opinion, which, if you demonstrate, others certainly will not have. Carlyle says, "what we call genius is that which enables a man to express what all men are not far from saying and are willing to say." We

should all be more like geniuses if we had the courage of our convictions, and had the courage to say it.

I am also reminded of the necessity of broad-mindedness in your medical study. Do not allow any special aptitude for a particular branch to cramp you in other directions. For the present your aim should be to obtain such a general sound knowledge of principles and practice of the science and art as the few years will allow you to. This is an age of specialism, and before you know the names of the bones almost your friends and fellow students will ask what specialty you are going to take up. Tell them general medicine. Specialty is necessary on account of the enormous scope of the science of medicine, and men must be found to limit their efforts, and in so doing acquire a degree of skill impossible to the general practitioner whose sphere knows no such limits. Until you have shown yourself possessed of general knowledge and experience you have no right to be a specialist. A specialist should know everything known about something, and something about everything else. He too often knows something about something and nothing about anything else. Cavities have a general charm for him and gradually his view of life and disease is limited and grows as narrow as the orifice to the particular cavity. He becomes like the frog in the caves of Kentucky, with rudimentary eyes, but no sight; their eyes have long disappeared for want of use.

This department habit of mind is always narrowing and tends to foster sometimes ridiculous extremes and impair the power of forming true conception of the case.

As an illustration, the *Twentieth Century Practice of Medicine* has just been published and is written by as many doctors. The nose, for instance, is handed to an eminent authority in London, but, lest the weight of it should be detracting, the nasal pharynx they sent to France, while the larynx is brought over to North America, leaving the trachea and bronchi behind, which, perhaps, being considered commonplace, has been sent to Scotland, while the remainder of the respiratory system, the lungs, have been sent to South America, handicapped, however, that they should not be considered in relation to contagious diseases; and, finally, the accessory sinuses and the bacteriological features are further distributed, one to San Francisco and the other to a Japanese, I believe, sojourning in Germany.

After all this, I fear you will think medicine is only laborious; that it is a vocation without its pleasures. Not if pleasure consists

in anticipation, realisation and reflection. Medicine is full of them. Like the explorer and sportsman, the difficulties of the struggles and hardships are soon crowded down by the memories of successes, and the pleasure of achievement. Especially is this the case if medicine is approached from the scientific standpoint.

Remember, the question for you to decide and to determine is not what sort of a career is medicine, but what sort of a man are you for medicine.

A REPORT OF THE OPERATIVE TREATMENT OF SEVERAL CASES OF FRONTAL AND MAXILLARY SINUSITIS.¹

By FRANK WHITEHILL HINKEL, M. D., Buffalo, N. Y.,
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IN THE past few years the surgery of the sinuses adjacent to the nose and ears has transcended in interest the well-established methods of treatment of these organs themselves. Our ability to recognise diseased conditions of these sinuses has been increased, and by various modifications of technique our operative measures for their relief have been made more effective.

As you know, chronic empyema of the frontal sinus has little or no tendency to self cure. The narrow infundibulum, choked with swollen mucous membrane and granulations, affords very imperfect drainage to the products of an infective inflammation that may have extended from the nose. The dull frontal pain, the benumbed mentality, the depression of the general health, and the offensive unilateral nasal discharge, may improve at intervals, but only to be followed by fresh exacerbations; and erosion of the posterior wall of the sinus with fatal involvement of the cranial contents may occur at any time, though more often the ocular orbit is invaded. The case of frontal empyema, to which, with comments on its course and treatment, I would call your attention, is as follows :

Case I.—Mr. B., aged 38, was attacked by epidemic influenza in February, 1898, with severe pain over the left eye, followed by free purulent left-sided nasal discharge, at times of an offensive odor. For a number of years he had been subject to hay-fever symptoms in the summer time, with occasionally wheezy breathing, especially if in the country. When first examined in September, 1898, seven

1. Read at the Surgical Section, Academy of Medicine, October 3, 1899.

months after his influenza, there was free offensive purulent discharge from the left nostril. A unilateral discharge of muco-pus from the nose is indicative of one of three conditions : a foreign body lodged therein, or an osteitis, usually syphilitic, or an empyema of one of the accessory sinuses. In this case the first two conditions were excluded. There were present left supraorbital pains, and tenderness at times on pressure upon the left eyeball. Supraorbital pain is often present in antral disease without involvement of the frontal sinus, and this symptom alone has little significance as regards the diagnosis of frontal empyema. The general health was somewhat impaired.

Examination showed some crusts and muco-pus beneath the left middle turbinate in the vicinity of the orifice of communication between the antrum and the nasal chamber. There was slight tenderness on pressure over the left antrum and left frontal sinus. Antral translumination showed relative darkness of the left malar region. Translumination, when the difference in translucency of the two sides is pronounced, is of much value in confirming the diagnosis of antral empyema, but, as is often the case, if there be a general thickening of the nasal mucous membrane from long standing inflammation, its results may be so indecisive as to have little value. An imbedded root, the remains of the left superior second bicuspid tooth, which had been lost years before, was extracted and found sound and not penetrating the antrum. The antral floor was broken through and a large amount of very offensive pus syringed from the antrum. This treatment was kept up for a month by the patient at his home at a distance from Buffalo. At the end of this time there was very little flocculent discharge, without offensive odor, when the antrum was syringed, but pus was seen to drain from the extreme anterior portion of the left middle meatus immediately after the antrum was syringed clear. The anterior extremity of the left middle turbinate was then removed and the anterior ethmoid cells opened and curetted. In another month, October 20th, the patient reported with an increase of discharge from the left nasal chamber, and occasional left supra-orbital pain, followed usually by increased nasal discharge. There was slight tenderness on firm pressure over the left frontal sinus. Frontal translumination was excellent on the right side and revealed a large sinus. There was darkness over the left supraorbital region. The left antrum contained a large amount of pus and presented the usual signs of antral empyema.

Opening of the frontal sinus was now recommended. In January, 1899, the patient, who had lost weight and whose general health was beginning to fail, consented to the operation. On January 25th, at the Buffalo General Hospital, after shaving the left eyebrow, an incision was made along the inner half of the left supraorbital ridge to a little beyond the middle of the glabella, the soft parts and periosteum were retracted and the anterior wall of the left frontal sinus opened with a small trephine. The incision thus made has cosmetic advantages over the vertical incision in the median line of

the forehead. The regrowth of the eyebrow almost conceals the scar if the external wound heal kindly after the operation. The sinus was found filled with a greenish offensive pus. The incised tissues were protected by a dam of iodoform gauze and the sinus flushed with a normal salt solution until the pus no longer welled up. The sinus was unusually large, extending far externally and posteriorly over the left orbit. Its walls were thoroughly curetted and the naso-frontal canal, located by a curved probe, was enlarged with a trocar and curette until an ample opening communicated with the nasal chamber, presumably through the anterior ethmoidal cells. A strip of iodoform gauze instead of a drainage tube was introduced into the nasal chamber through the enlarged infundibulum, as suggested by Bryan, and the external incision closed by silk suture. A dressing of aseptic gauze and cotton was applied and retained by a gauze bandage. Intranasal insufflations of iodoform were applied every three hours, after gentle spraying of the nose with normal salt solution. No other treatment was given. There was no rise of temperature. The gauze drain was removed by the nostril on the third day. On January 30th, the sixth day, the wound was redressed and the stitches were removed. There was good union. On February 1st, the eighth day, the patient was discharged from the hospital. The left antrum on syringing was found entirely clear and no subsequent unusual discharge occurred from the left nasal chamber. There has been no return of symptoms of disease. There remains no specially noticeable scar and a gain of seventeen pounds in weight was reported some months since.

The points of interest in this case history are the masking of the primary frontal empyema by the symptoms and signs of the secondary antral abscess; the persistence of the antral discharge despite drainage and cleansing of the antrum, and its immediate cessation as soon as drainage of the frontal sinus was secured. Bryan has demonstrated anatomically that occasionally the infundibulum by a peculiar conformation of the external wall of the nose drains its discharges into the corresponding antrum rather than into the anterior superior portion of the nasal chamber. This case appears to be of that type and shows the difficulty at times of locating the source of a purulent nasal discharge.

You are familiar with the procedure usually followed for the relief of antral empyema. The purpose of operative interference is, first, to remove if possible the exciting cause, and, second, to secure drainage and a counter opening for cleansing. The peculiar location of the antral orifice in the upper third of the nasal wall of the antrum prevents the free drainage of pathological accumulations within the antrum through the normal passage. To secure the required drainage it has long been the custom to extract the second bicuspid or

first molar tooth on the affected side. The roots of these teeth frequently penetrate the bony floor of the antrum and access for small instruments is easy through the opening left by their extraction. Should the bony floor of the antrum be intact, it is very thin above the socket of the extracted tooth and easily perforated.

A large proportion of cases of empyema of the antrum is due to primary dental disease, particularly if involving the bicuspid or molars. The operation just described secures at once the removal of the cause of disease and the required counter opening for cleansing. In comparatively recent cases of dental origin it unquestionably best fulfils the indications for treatment. Where the teeth are not diseased and the antral involvement is comparatively recent, drainage may be secured and a cure accomplished without the sacrifice of a sound tooth by the method suggested by Mickulicz. The nasal wall of the antrum is perforated beneath the inferior turbinate and the antrum washed out at intervals through a short canula that may be left *in situ* without inconvenience to the patient. This method is applicable to the treatment of a limited number of cases as well as for diagnostic purposes as the procedure is not formidable.

In cases where the antral empyema is of long standing, whether of dental or nasal origin, the operations described are usually insufficient for a cure. Free access must be had to the antral cavity that its inflamed thickened and granulated mucous membrane may be thoroughly curetted and subjected to subsequent treatment if necessary. A sufficient opening of easy access can be made only in the anterior wall of the antrum in the region of the canine fossa, any diseased teeth being extracted at the same time as a preventive measure. A drainage tube is generally inserted through which subsequent treatment can be continued. Some operators repeatedly tampon the cavity of the antrum for a long period, but I do not see any advantage to accrue from this, as it is impossible to obliterate by connective tissue formation this large cavity between fixed bony walls, and I can conceive of no other purpose to be gained by the tamponing. The results of this more radical method have not always been entirely satisfactory. In many cases the obstinate antral discharge continues unabated if less offensive. The drainage tube itself is irritating and if the opening through the canine fossa be kept patulous for treatment, it is a ready means of infection from the bacterial hot bed of the mouth. About two years since Luc suggested a modification of the radical antral operation. Caldwell, of England, had proposed the same thing a few years earlier, but his suggestion failed to

secure attention. Luc, after the antrum was opened through the canine fossa, made a counter opening through the nasal wall beneath the inferior turbinate and then closed the opening through the canine fossa by stitches through the mucous membrane of the oral conjunctiva.

I wish to report two operations for chronic antral empyema, in which I followed the method of Luc. Each of these cases was of great chronicity. In each case I followed the usual steps for laying bare and opening the anterior wall of the antrum, and I will confine the description to the novel features of the operation; the opening of the nasal wall of the antrum beneath the inferior turbinate, and the immediate closure of the gingivo-labial incision. I found the free hemorrhage following the incision into the gingivo-labial conjunctiva lessened by an injection of a 1 per cent. cocaine solution beneath the mucous membrane just as the anesthetic was about to be administered. In one case in which I had been treating the antrum through Freeman's canula beneath the inferior turbinate, I was able to reduce the hemorrhage, that is so profuse when the antrum is opened, by injecting into the antrum just before the operation about a drachm of a solution of suprarenal gland.

Case I.—Miss S., aged 37, empyema of left antrum, marked by moderate discharge and at intervals deep-seated pain in the malar region. On February 9, 1899, at the Buffalo General Hospital, with trephine and bone forceps I removed part of the anterior wall of the left antrum. There was no particular difficulty in breaking down the nasal wall beneath the inferior turbinate. I passed a curved trocar within the nostril and beneath the anterior extremity of the inferior turbinate and readily broke down the thin antral wall. Using the point of the trocar as a guide through the freely welling blood within the antrum, I enlarged the opening with a sharp spoon. I encountered great difficulty in endeavoring to pass an iodoform gauze drain from the antrum through the nasal chamber and out at the nostril. I closed the gingivo-labial incision with silk suture. The escape of air through this aperture for several days, when the nose was blown, showed that the closure was imperfect. However, by the fifth day, when the stitches were removed, the incision was closed. A small area of numbness about the left angle of the mouth was noticed for several days after the operation. After the fifth day the antrum was flushed by means of a Eustachian catheter through the opening in the nasal wall. A slight amount of muco-pus escaped at each washing. After several weeks the nasal opening contracted so that a small canula could not be introduced and there was some return of pain. Under cocaine I cut away the anterior dependent portion of the inferior turbinated bone and with a sharp spoon enlarged the opening into the nasal wall of the antrum. This procedure was

followed by relief and on April 27th the patient was discharged apparently well.

Case II.—Miss M., left antral empyema, operated on at the Buffalo General Hospital, March 9, 1899. I had previously been treating the case without relief by cleansing through a perforation in the nasal wall of the antrum. The inferior turbinate was dependent and lay close to the antral wall. I removed the anterior portion of it to facilitate the passage of the trocar into the antrum. The antral walls were carefully curetted. I did not introduce a drainage tube into the nose. After a counter opening had been made beneath the inferior turbinate the gingivo-labial incision was allowed to fall into place without stitches and union followed nicely in a few days. However, a small abscess occurred later on the margin of the wound, requiring curetting. It did not communicate with the antrum. This case improved rapidly for several weeks. The antrum was readily flushed through the nasal opening and I found injections of alcohol serviceable in reducing the discharge and lessening its purulent character. In about three weeks the nasal opening began to grow small and the discharge to be somewhat confined within the antrum. On April 19th, I enlarged the nasal opening under cocaine with a curette and used at intervals injections of alcohol and of a solution of iodoform in ether. Since May 26 there has been no unusual nasal discharge nor any symptoms of antral disease. Antral translumination is equally good, though there is no left pupil glow. This case therefore may be considered cured.

Valid conclusions as to the value of this operation cannot be drawn from so limited a number of cases, but I offer their details for your consideration. The limitations of the operation and the proper choice of cases for its performance will be facilitated by reports of its results whether successful or otherwise. I see several directions in which my own technique can be improved in subsequent operations. The introduction of the drainage tube I have found the most difficult step in the operation. To facilitate this I have had made for me a modification on a small scale of Belocq's canula. Introduced through the nose and with the probe point thrust forward and upward into the antrum, it brings readily into reach the ligature to which the drainage tube or strip of gauze can be attached and then drawn through the opening in the nasal wall and out at the nostril.

The suturing of the gingivo-labial incision seems from my limited experience to be unnecessary. It is difficult to keep the stitches already inserted from being somewhat torn out during the insertion of the later stitches, on account of the manner in which the parts must be drawn upon to secure access to the lips of the wound. The parts coapt readily without stitches and there is but little necessary

motion of the gingivo-labial fold. The wound need not be disturbed if the patient be fed upon soft food, taking care to use the side of the mouth opposite to the operation in masticating and to avoid blowing the nose violently. As shown by my second case healing occurs readily without stitches if a little care is used.

412 FRANKLIN STREET.

DISCUSSION.

Dr. PARK LEWIS thought that a less radical method of surgical procedure might be followed by better results.

Dr. PARK recalled operating several years ago in antral cases by the method advocated by Mikulicz. He advises the most radical methods in all old intractable inflammatory infections of the sinuses or antrum. In opening into the antrum the opening in the anterior wall should be large enough to admit one or two fingers and to permit of inspection as well as digital examination.

Dr. BLAAUW reported two cases of chronic frontal sinusitis in which he chipped off part of the anterior wall after a vertical incision and in each case recovery was rapid.

Dr. MILLINER reported an anatomical anomaly of the antrum in the first case of chronic antral disease that he had operated upon. A bony septum dividing the antrum into two cavities was discovered and the unaffected cavity was the first to be opened into. A continuation of the opening led into the second cavity where the infection was found.

SUBPHRENIC ABSCESS.¹

By PRESCOTT LeBRETON, M. D., of Buffalo, N. Y.

AS CARL BECK wrote in 1896, subphrenic or subdiaphragmatic abscess resembles appendicitis in the fact that whereas formerly subphrenic abscess was recognised only at autopsy, now, owing to careful study of etiology and pathology, it is diagnosticated and searched for clinically. Leyden, in 1880, was the first to call the attention of the profession directly to this affection and Maydl's monograph, in 1894, summarised all the facts pertaining to the subject which then existed. Scientifically speaking, the diagnosis is the most interesting part of the subject and with this we shall chiefly deal.

Subphrenic abscess is always a complication, secondary to traumatism or disease elsewhere. There is not one abdominal organ, but has been found at sometime, when undergoing suppurative

1. Read before the Surgical Section of the Buffalo Academy of Medicine, October 3, 1899.

inflammation to have caused cases, even the pancreas. The most frequent cause is rupture of a gastric or duodenal ulcer, as Maydl found in thirty-five out of one hundred and seventy-nine cases. The second cause in order is appendicitis, the appendix usually lying behind and external to the cecum and the infection traveling upward to the diaphragm, either directly along the peritoneum or indirectly by the lymphatics. Other causes are: abscess of the kidney, perinephritis, cholecystitis, traumatism to abdomen or subphrenium, rupture of typhoid ulcers of the intestine, echinococcus cyst of the liver and pelvic abscess. To these we may add pneumonia of the lower lobe of the right lung, and empyema perforating the diaphragm.

Subphrenic abscess is most often situated on the right side in the male, owing to the fact that appendicitis and ulcer of the duodenum occur more frequently in the male sex. In females, on the other hand, there is a greater preponderance of cases of ulcer of the stomach, which frequently causes the location of the abscess on the left side.

The lesion in this disease is found to be a localised suppurative peritonitis beneath the diaphragm, either between the diaphragm and the liver or diaphragm, stomach and spleen. If the infection has been carried by the lymphatics, as from an appendix abscess, the pus may be extraperitoneal and not intraperitoneal. Experiments have shown that a colored fluid poured into the abdominal cavity is soon seen in the lymphatic vessels lining the under surface of the diaphragm. This upward course of the lymphatic current explains the complication.

As subphrenic abscess so frequently communicates with the gastro-intestinal tract, it contains, in one-third to one-half the cases, considerable gas. To this condition Leyden gave the name of "pneumothorax subphrenicus."

Lampe and Freiberg have reported cases in which there was an accompanying serous exudation in the pleural cavity. It is well to remember this, for an error in diagnosis may be made if the needle withdraws only clear serum, and a further effort should be undertaken with a longer needle to reach the pus.

A leucocytosis is regularly present, Cabot reporting four cases, in all of which there was a marked increase in the number of white cells.

Leyden's chief point in differentiating a subdiaphragmatic abscess from an empyema or pyopneumothorax was this: if in a patient with symptoms of effusion in the thoracic cavity there had never been

during or at the beginning of the trouble any cough or other signs showing disease of lungs or pleura, and if there had been a previous history indicating inflammation of one of the abdominal organs, the diagnosis was probably subphrenic abscess. That this is not wholly true is well shown by Meltzer, who reported typical cases due to pneumonia of the right lower lobe. If we except, however, those rare instances, where subdiaphragmatic abscess is due to pneumonia or empyema, we have the most important clue to the diagnosis—namely, the preceding history of abdominal and not thoracic disturbance.

Pain over the lower ribs, radiating to the shoulder, is a frequent symptom, sometimes accompanied by attacks of singultus. It is of value chiefly in connection with the other signs. In subphrenic abscess we have a dome-shaped area of dulness, corresponding to the convexity of the diaphragm, beginning at the third or fourth rib in the mammary line, rising as high as the sixth rib in the axilla and then gradually descending posteriorly toward the spine. In empyema in this situation we have the opposite, the line of dulness being concave upwards. Careful percussion, mapping out the exact border, makes this test of value.

In subphrenic abscess, if the diaphragm is not yet so paralysed by pressure or by the absorption of toxins that it cannot move, a full inspiration may cause the upper line of dulness to descend and the respiratory murmur of healthy lung may be heard at a lower point. Also the external portion of the exploring needle will oscillate during respiration in the opposite direction from that of the diaphragm, the so-called Fürbringer symptom.

If the abscess is situated on the left side, it causes a dull note on percussion over the triangular space of Traube, between the precordium and the seventh rib. Only extensive cases of empyema can effect this change.

Pfuhl's method is to connect the exploring needle with a manometer and notice the change in pressure. Normally the intrathoracic pressure is greater during expiration and less during inspiration. So in pyopneumothorax the manometer shows a lessening of pressure during inspiration. In subphrenic abscess there is an increase of pressure during the inspiratory act due to the contraction of the diaphragm. If no gas is present we may simply watch the flow of liquid and not use the manometer. Several writers, however, as Carl Beck, affirm that this means of diagnosis will prove rather of theoretical than practical value.

Brown reports a case in which he aspirated pus containing the bacillus coli communis. The operation afterward proved the abscess to be subphrenic, caused by a ruptured gastric ulcer. He urges that if in any case, after aspiration, the colon bacillus is found in pure or mixed culture the pus probably lies below the diaphragm.

To differentiate a small subphrenic abscess from an abscess of the liver is very difficult. The main point here is to remember that a subphrenic abscess lifts the diaphragm more than it depresses the liver and that an abscess of the liver causes chiefly downward displacement of that organ.

The prognosis is fair when surgical intervention is early and thorough. Delay allows the pus to burrow into the pleural cavity, lungs, stomach or peritoneum, or the patient succumbs to sepsis.

The treatment is very similar to that of empyema. Resection of a part of either the eighth, ninth or tenth ribs in the middle axillary line, incision of the diaphragm, evacuation of the contents of the abscess, and drainage through one or two tubes. If the pleural cavity is encountered and is not shut off by adhesions, a circular row of sutures may be inserted and protected by gauze.

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DISCUSSION.

DR. PARK—I think emphasis should be laid on the free communication between the abdominal and pleural cavities by means of the lymphatic vessels in considering the etiology of this affection.

DR. LYON—Quoting from Cantlie's monograph on this subject laid especial stress on the value of blood examination in this condition. Bacteriological examinations from pus found in these abscesses were frequently found to be sterile. He thinks the amebæ coli is the most frequent cause in this affection.

DR. KRAUSS—Reported that a pupil in Ehrlich's clinic stated that the presence of a leucocytosis in deep seated abscess does

not show anything characteristic and questions the utility of blood examinations in this affection.

DR. HARTWIG—In discussing the operative procedure does not think that if the diagnosis has been positively made between a subphrenic and intrathoracic abscess that going through the pleural cavity is to be recommended, even if the pleural surfaces are stitched together before entering the abscess. He advises opening anteriorly or posteriorly through the peritoneal cavity, as the case may indicate, though transpleural successes are recorded.

HOUSE-TO-HOUSE OPERATING.¹

By EDWIN RICKETTS, M. D., of Cincinnati, O.

THE skilled abdominal and gynecological surgeon of today is a product of surgical evolution, to which no man ever gave such an impetus as the great and lamented Mr. Lawson Tait. His lines in surgical work were so simple, so thorough, so rapid, and withal so exacting on himself, assistants, nurses and patients, for pushing rapidly the case to a successful issue, or to the best possible result, that we should never lose sight of them, lest we forget that simplicity, rapidity, rigid cleanliness, and thoroughness are to be our key-note of success.

Mr. Tait began his work in his private house, without trained nurses, and even then had no unusual death-rate; but he gradually lowered the same markedly after training his assistants and nurses after his own fashion. After all of this experience he resorted to house-to-house operating, a most fitting close of his life's work in surgical diseases of women, which is food for sober thought, lest we are tempted to go off at a tangent by falling in line with the fad of the day—that of chemical antiseptics, as is only too often attempted to be practised in many of our hospitals.

The fresh air of country homes with their hygienic evolutions are still things paramount, that come to our aid in doing house-to-house surgery. While I am ready to acknowledge that the surgeon in our line of work, as in others, is improving, yet I stand ready to make the same claim for the general practitioner, in his ability to attend to the after-treatment, assisted by the nurse, aided by the telephone, telegraph and by rapid transit if the surgeon is needed. There is a mental dread of going into an institution which in many patients brings

1. Read at the twelfth annual meeting of the American Association of Obstetricians and Gynecologists, held at Indianapolis, September 19-21, 1899.

on, only too often, post-operative disasters that are undeniably eliminated by operating in their own homes; there is a love of home developed under just such trying circumstances to these patients, that should not be underestimated. How often do we see patients expressing a desire, after being operated upon in a hospital, either public or private, for something seemingly trivial from home, and how matters are helped if the request is granted and fulfilled.

Iron bedsteads, with other improved household furniture, are rapidly gaining access to many of the rural houses as permanencies, and yet they are not an absolute necessity for a patient that has to undergo a surgical operation. I beg to call your attention to the fact that the late Dr. Alexander Dunlap did 400 ovariectomies with a death-rate of but 15 per cent., never putting one of his patients on an iron bed; he never saw our modern operating tables with their multiplicity of contrivances for the greater part of his work was of the pioneer kind.

The numerous operating tables, giving all planes, from standing a patient on his head to the reverse position, found in many "diving tank" operating rooms, are not superior in obtaining results, to those of the kitchen table found in any house of the land; nor is the showy cleaning of the patient ever to be countenanced—especially while under anesthesia; such work should be done most thoroughly and most carefully before anesthesia is begun. The robing of operator, assistants and nurses in rubber suits and fishing boots, while the audience composing the "outer circle" is looked upon as being composed of persons teeming with dangerous and detestable microbes, is truly degrading to our art; it lowers the dignity and usefulness of our profession and is anything but a scientific show. This "outer-circle" soon makes up its mind—and justly, too,—that surely it is not so dirty, for the infected cases still follow notwithstanding the great hue and cry of these would be "holier than thou" surgeons.

Treves has put it well in saying that "such is more allied to the fervent idolatrous ritual brought down to the level of popular performance." The modern, smoothfaced, rubber-of-mail surgeon, with rubber gloves, face mask, boots, hat and coat, is truly a sight to behold, but not one for emulation, either from a scientific or a practical standpoint. He is a walking, self-instigated Turkish bath, and how the dirt with the epithelial microbes—anal and possibly urethral and vaginal as well—must pour down, mixed with perspiration, into the rubber wells of boots; this act of nature perspiring is certainly not a cleanly process, but it goes on right in the midst of

operating, and is promoted and hastened by the wearing of the outfit above described.

My house-to-house work is done on the kitchen or dining-table in each house, properly arranged by the nurse sent ahead the day before I operate. The doctors invited are not asked if they had taken a bath; they were found to be gentlemen, which is sufficient for me; they come into the room when we are ready for them, look on, touch nothing in any way connected with the operation, and retire as soon as the operation is completed. Frequently some of the relatives desire to witness the operation and when it is possible one gains by allowing them to do so.

I take no steriliser to make a display in cleaning instruments or dressings; no baked glass jars for holding dressings—simply the original package—no foot giggers to cause the hot and cold water to flow; no glass-topped operating table; no dressing forceps, save nature's own, well cleaned before using them; no instruments resting in hot water, or in antiseptic solution; no blue, red or white water impregnated with chemicals to produce necrotic tissue; but after washing the abdomen thoroughly with soap and water, then likewise our hands, we applied freely 98 per cent. alcohol, and then began our work, using towels that had been dried in the sun and ironed by the help at hand.

My results have been all that the most fastidious could desire and of the houses of different construction that I have operated in, the old log house stands supreme for cleanliness much to the credit of its occupants, and which is all that need be desired.

Richelot, in a recent article On the relative value of antiseptics and improved technique, before the International Gynecological Congress says, "that the very best antiseptic does not retain its value for clinical purposes, and that laboratory prognoses were not always to be relied upon. It was found that the use of antiseptics was not only inefficient, but at times dangerous, hence it gradually became more or less discredited, whilst sterilisation by heat has been daily gaining favor." He further says, "the best results are obtained by the surgeon who knows how to use his hands and his common sense, and that methods continue to become more and more simplified, and in that way lies progress."

Bumm, on the same subject, says, "the absolute reliance on the protective power of antiseptics has been a good deal diminished by exact investigations, as it has been proved by a whole series of experiments and observations, that the elimination of all micro-

organisms during the operation has not been attained; there is no way to remove, with certitude, all microorganisms from the hands; it is therefore illusory to think that either asepsis or antiseptics can bring about a sterile condition of the wound; in spite of the proved presence of microorganisms, most wounds heal without suppuration and fever. In addition to this, short operations do not so much tax the resisting power of the wounded tissues as well as the entire organism. To expose the peritoneal cavity during a long time has a well known bad influence on the heart, the intestines, and the serosa. Asepsis has delivered us of the dangerous application of too much concentrated disinfectants. Antiseptics and improved technique have to go hand in hand—the drier the wound the better are the chances for primary healing.”

The last statement I want to lay stress upon as being a surgical fact recognised for centuries. The tendency of medicine and surgery is too prone to claim that many individual views are new when the author has been dead for years. Let us never fail to honor the memory, when possible, of those to whom honor is due. Thorough operating, under rules of simple cleanliness, will continue to produce more and better results than is possible with the strictest rules of antiseptics; slow, tedious operating, carried out with hesitancy, is always to be condemned.

House-to-house operating means house-to-house isolation and for this the room-to-room risks of infection in a hospital are lessened to a minimum degree. Surgical cleanliness is surgical godliness, and every time we forget this we add to our death-rate. Chemical perfumes of varied kinds will never displace soap and hot water judiciously applied in surgery.

The average rural home location is not bad, and with scrubbing-brush, water and soap, it can be continually made to shine out for the demonstration of surgical truths, that are Gibaltars to us; they are the indwellings of the people, who have long since learned to love and cherish them in sickness as well as in health. Our best surgery can be given them here, and our reward is to be the lowest death-rate possible.

415 BROADWAY.

THE Woman's Sanitary League of Pennsylvania has been organised at Philadelphia, with the objects of advancing sanitary science, promoting public health and good government, and forming country and local auxiliaries to extend the beneficent work.—*Medical Age*.

THE DUTY OF THE GENERAL PRACTITIONER TOWARD THE SPECIALIST.¹

By E. L. MOONEY, M. D., Syracuse, N. Y.

WHAT general practitioner has not had cases which have puzzled him to such an extent that his diagnosis was far from clear or satisfactory to himself at the time and later found that he was far from right, and what have we done in these cases? We have gone on treating them along the lines we thought best, hoping and trusting that we were right, and anxiously awaiting developments.

It seems to me that in continuing in this uncertain manner we are not doing justice to our patients, to our professional standing, or to our conscience, but instead we should call in consultation a professional brother, who has had greater experience, or who has devoted several years of special study and work in the class of diseases with which our patient is suffering—namely, a specialist. In a great majority of cases the cause of the malady is very plain to him, and if it can be removed, and is, then our patient is either cured or greatly benefited, and we get our share of praise from the patient and we are also satisfied that we have done our duty to the patient, the specialist, and ourselves. I will give the history of a few cases to make plain my position.

Case I.—Mrs. M., aged 42 years, a resident of Syracuse for the last four years—previous to that lived in a country village—consulted me two years ago for an acute cold in the head, and a very severe facial neuralgia, almost totally unfitting her from performing her ordinary household duties. She had been unable to eat or sleep since the advent of this attack three days previous. She had been a sufferer for about nine years and having lived in different localities, had had several different physicians, who usually saw her during an attack similar to this, and who would prescribe some opiate, large doses of which would only relieve the acuteness of the pain. She had all the teeth on right side of upper and lower jaws removed by the advice of one physician, and another recommended section of the facial nerve, but to this she would not consent.

Upon examining patient's nose, I found all the membranes intensely inflamed and swollen, the middle turbinates especially, which were fairly blue, the pressure was so great. After treating the nose with sprays and the like, a retraction of the membranes took place generally and the middle turbinates retracted in places, so that there was a space between them and the septum. The patient declared that this had given her more relief than a hypodermic of

1. President's address, read at the thirty-second annual meeting of the Medical Association of Central New York, at Syracuse, October 27, 1899.

morphine. I advised her to consult a specialist, which she did; had both middle turbinates removed, one of which had grown to the septum and after a period of six months, during which time she was having the operations and the mucous membranes stimulated by local treatment, she calls herself cured, and so she is, practically; yet if she takes cold she will have a slight headache for a few days until the congestion leaves the membranes.

Case II.—Mrs. W., aged 36 years, resident of a neighboring town, consulted me one year ago with the following history: She would have periodical headaches come on without warning, both frontal and occipital, so severe that she was always obliged to go to bed and send for a physician to relieve her and very often she would be in a semicomatose condition when the doctor arrived. After going through these attacks on an average of once in four or six weeks for two years, her physician told her that her case puzzled him, and advised her to go to Syracuse and consult some physician there. She came, and the friends with whom she stopped came with her to my office; she was then suffering with a dull headache over the eyes, left from an attack from which she had recently recovered.

Upon examining her nose, I found a deflected septum and one middle turbinate pressing intensely. I relieved this pressure by local treatment and her headache disappeared. I advised the removal of the middle turbinate and told her I felt sure it would modify her headaches, but that there was some other cause for the severe occipital pains. She acted upon my advice and had a specialist remove the middle turbinate and felt so much relieved in three weeks, that she went home feeling sure she would never have another headache, though I tried to discourage that idea. In about eight weeks, dating from the previous attack she had another, but it was almost entirely occipital and not near so severe and did not last near so long. Her physician wrote me about it and I wrote him to advise her to return for an examination of the pelvic organs. She finally consented and I found a greatly enlarged and sensitive uterus with a bilateral laceration, to which I attributed her occipital headaches. I sent her to the hospital and after reducing the enlarged and sensitive uterus to its normal size, repaired the laceration, and in due time she went home, and, now, eight months since, informs me that she has not had a headache severe enough to prevent her from performing her household duties.

Case III.—Mrs. S., aged 65 years, resident of this city had suffered with frontal headaches and facial neuralgia of the most intense type for thirteen years. She would have spasms of pain when walking in the street, which would make her scream aloud, no matter how hard she tried to prevent it. She never passed a day or night without more or less pain. She had been led to believe by her physician that there was no relief for her except to take morphine, when the pain was too severe or when it lasted too long. This she had been doing for two years, and it was with great doubt that she sought relief in any other direction.

She consulted me eight months ago; a glance at her face indicated at once that a great amount of pain at least was due to her nose, for it was all out of shape from distended ethmoids and intranasal pressures. A thorough examination proved this to be true. I recommended her to a specialist, who removed the middle turbinates, opened the ethmoids and secured good drainage, so that now after eight months she is greatly improved and benefited, though not entirely cured, owing to the long standing pressures and consequent weakness and unhealthy condition of the tissues, which will gradually improve by proper treatment.

In conclusion, while I do not claim any new ideas in this address, still if by it I can be the means of saving even one of these poor mortals the agony he or she must endure, I shall feel that it has been productive of much good.

PEN PICTURES OF MALARIA.

By NELSON W. WILSON, M. D.,

Acting Assistant Surgeon, U. S. Army.

IN PRESENTING these pen pictures, it is not the intention to in any way give a detailed clinical study of disease, its etiology, or treatment, but to present as briefly and as graphically as possible in limited space, a series of sketches of types of malaria, with here and there a case whose features were either interesting or puzzling, and in the most informal manner.

There are reasons why it was impossible to make a detailed and scientifically recorded study of the cases reported at the post hospital, Fort Porter, from the time the 13th U. S. Infantry arrived in Buffalo from Cuba, in September, 1898, to the time the command left for the Philippines, in April of this year. In the first place, there was not time to keep records or make detailed studies of individual cases, because of the great amount of work to be done and the lack of assistance and hospital accommodation. The hospital at Fort Porter contained eight beds when I reported there in September, 1898, and the day the regiment arrived in Buffalo, I had to use every cot I could get hold of to care for the seriously sick of the command. In addition to caring for those at the post many calls were received to visit soldiers of other commands than the 13th, who were confined in hospitals whose papers needed straightening out, such as extension of sick leaves, and the like; as well as soldiers ill in boarding houses who were entitled to medical attendance. This, in addition to the paper work required in the conduct of a post hospital, was sufficient to keep one on the jump from sick call in the early morning until late

at night. The most one could do was to do his best under the circumstances.

That is why the cases referred to are presented purely as pen pictures of events in the course of an army post practice, and not given in properly tabulated, detailed form.

Dr Walter D. McCaw, captain and assistant surgeon, U.S. Army, assumed charge at the post hospital as post surgeon in October, and the work was then divided. Yet in spite of this we both had all we could do.

The first case came to me during the march of the 13th to Fort Porter from the depot. At North street a soldier fell out and tumbled in a heap on the sidewalk. He presented the perfect picture of a man overcome by heat. He was put into an ambulance and hurried to the Fort. On the way he recovered somewhat, and told me he was always seized the same way at the onset of a malarial attack. This collapse was followed about two hours later by the typical chill, fever and sweat, and the next morning he was apparently as well as could be expected of a man who had just campaigned in Cuba, and climbed San Juan hill in the front ranks, after lying in the trenches, half full of water and mud. He had a number of attacks after that, at irregular intervals, and each one began with utter and alarming collapse. He did not appear to mind the seizures very much either. They did not depress him as they did some of the men, and he bobbed up after passing through a paroxysm as serenely and as happy as though there had never been such a thing known as malaria. He was cured eventually by the treatment to be referred to later. There was not, *en passant*, a single failure that I can recall now, to stamp out malaria, when this treatment was followed.

In Cuba and at Montauk Point these men had been loaded with quinine in pill form. In Cuba they lived largely on a tinned beef diet, and in the majority of cases which reached Fort Porter there were stomach and intestinal disturbances of more or less serious type. These troubles were aggravated in many of the cases by the open-handed generosity and too kind hospitality of friends and relatives, who, in their endeavor to make up for the lack of food in Cuba, loaded up the returned soldiers with meat and drink of all varieties. There were quite as many reunion parties as there were returned soldiers, and these were invariably followed by a corresponding increase in the numerical strength of the sick report next morning. Right here, it will be of interest to note the effect of army discipline.

The old, seasoned soldier, while quite as ill with malaria as any of the recruits, did not suffer from the stomach difficulties, because he followed instructions and ate nothing but the food served at the post hospital.

One of the most interesting cases was that of a corporal, who had typical attacks of malaria. He would report at the hospital with a chill, and be put to bed. The usual fever followed and he seemed to come around to something like normal shape. The first time, it was 10 o'clock in the morning when, after a chill, he reported that he felt very comfortable and wanted to get out in the afternoon and go to duty. At 12.30 he was feeling about the same, but his entire body was a pale yellow. Later in the day his skin had assumed an orange color. He was not what one would call sick—he merely presented a series of color-changes which passed away in a comparatively short time. The entire condition was repeated during a subsequent attack.

There were two cases of severe epistaxis. Every time these men were brought into the hospital they had nose-bleed, which resisted all treatment save posterior plugging. In one of these cases the hemorrhage was so severe and persistent as to cause anxiety.

Two men with unmistakable malaria reported with eye-trouble. Their vision was dimmed. A careful cross-examination revealed that one man had for over thirty days been taking on an average two grams of quinine a day; the other could not give a clear idea of how much he had been taking, but it was considerable. He had taken it in pill form, in powder and solution. He had taken it in every form imaginable, and his was as clean-cut a case of cinchonism as one could wish for. They were ordered to stop taking quinine, and did so. They had severe malarial paxoxysms, but the toxic amblyopia was relieved and eventually their malaria was cured.

One of the officers at Fort Porter could tell hours before he had a chill or rise of temperature—in several instances he has foretold an attack forty-eight hours before it came on, and that too when he felt as well as he ever did in his life. He used to have an uncontrollable desire to stretch his right foot, and did so unconsciously. There was no yawning, nothing but the stretching of his foot; when that began, he prepared for a chill.

Taste of a peculiar and unmistakable character in two cases foretold attacks. One man had the taste of nuts in his mouth. This was invariably followed by a paroxysm. The other man expressed his taste thus: "I feel as if I had had an old copper cent in my

mouth." In both cases chills and fever followed the unusual tastes.

An old-time soldier, one who had been in the service so long that he had become a philosopher, always reported at the hospital when he expected a chill. He foretold his attack by an itching on the abdomen. This was followed by a faint rash, and later the attack.

Hematuria occurred in three cases; not severe it is true, but always coincident with the attacks.

There were a great many cases where the malarial attack was preceded by severe gastric disturbances. These were most bothersome because it was hard to always differentiate between stomach disturbances caused by excesses of diet and drink and those caused by the malaria itself. There were some cases, however, where the statements of the soldiers could be replied upon implicitly, which were unquestionably caused by the malaria and preceded the attack. In other cases, the drinking of beer and whiskey were sufficient to produce an attack.

Two men presented startling pictures when they had their attacks. Their seizures were sudden, and profound. They were carried into the hospital in what, at first glance, seemed to be dying conditions. Respiration was slow and labored, pupils dilated, skin cold, eyes half closed and jaws relaxed, and they remained in this condition for some hours after their reception. It was their way of having malaria.

One of the most interesting phases of malaria which came under observation was that of a Rochester boy who had enlisted just as the regiment was starting for Cuba. He came back with a type of malaria which was wearisome, because it resisted all treatment. He was in bed and nothing which was done for him had any effect whatever. His temperature was up and remained up and he would not eat. I suggested to him one morning, as a sort of coxer, that I wanted him to make an effort to eat, because as soon as he got strong enough to get out, I was going to give him a furlough for thirty days so he could go home. It was a chance shot at diagnosis, but it turned out to be a good one. His temperature came down, his appetite returned and in a week he went away to his mother, weak but happy. He told me after his return that he could not tell what he wanted when he was so sick, but that the minute I said "home" and promised him a furlough, he knew he was homesick. He had some malaria afterward, but it yielded to treatment.

As to treatment we stopped all quinine, after giving it in all sorts of ways, and Dr. McCaw suggested salicylate of cinchonidia in essence of pepsin, .33 to the teaspoonful of pepsin taken a few minutes before each meal. To this was added a Blaud pill, modified, after each meal, and aloin, strychnine and belladonna tablets at bedtime.

That this general plan of treatment for malaria was successful is shown by the fact that not a soldier at Fort Porter died, and that all who were under treatment for malaria have gone to the Philippines, with the exception of two or three, who were left behind because of expiration of enlistment, and one because of chronic gastritis.

Severe chills were broken by the administration of what the soldiers called "knock-out drops." This was made up as follows:

R—Spts. chloroform.

Tr. opii āā . . . 1.33

Spts. frument 60.00

As soon as the efficacy of the cinchonidia mixture, which is now known among the soldiers as "the white medicine," was established, the Surgeon-General furnished it in unlimited quantities, and I understand it has been supplied for the Philippine service.

FORT PORTER, N. Y.

Clinical Report.

TRACHEOTOMY FOR CROUP.

By CHARLES A. ELLIS, M. D., Sherman, N. Y.

I WAS summoned, October 28, 1896, to see a boy 12 years old who had taken cold and was hoarse. He was a thick-set, rugged, hardworking lad, who had been at the "tail end" of a threshing machine the day before in a cold, raw wind. His temperature was 101° F, pulse 90, had a hoarse cough, to which he was said to be subject; appetite good, bowels regular, no soreness of the throat, and he did not seem much ill. I left a stimulating expectorant and some aconite, requesting to be notified in the morning if he was not relieved.

At nine o'clock same evening I was hastily summoned, the messenger requesting me to be expeditious, as the boy seemed in extreme danger. On my arrival, some twenty minutes later, I found him gasping for breath, in a perspiration that had drenched his clothing. His pulse was rapid and his face bore an anxious, livid

expression. An emetic was administered at once, but without relief. Explaining to his parents the need of intubation, I prepared to send for help and instruments, meanwhile hot applications to the throat were employed. In seven minutes from the time I arrived he stopped breathing.

His parents were informed that an incision would have to be made into the trachea to save his life, to which they consented. I made an incision into the trachea with a scalpel, using button hooks as retractors, and linen cloths, wrung out of a solution of permanganate of potash, for sponges. This was all the armamentarium that I could improvise. The incision through the trachea was soon accomplished, but so unconscious was the lad he never realised what was being done. Artificial respiration was begun, which soon developed regular, natural breathing. During this time I had sent to town for my emergency case and for Dr. C. H. Waterhouse. The distance was two miles and the boy was unconscious when he returned with some of the needed articles. Having no trachea tube we inserted strong silk strands into the edges of the trachea, and tied them behind his neck, but this did not seem satisfactory, so a thermometer case was cut off, heated in a lamp flame, bent into the desired shape, and used until a suitable one was supplied by Dr. C. B. Kibler, of Corry, Pa.

During these manipulations the patient became conscious and expressed himself as comfortable. His temperature fell to normal and he was feeling good the next day. His condition continued favorable and it seemed he would soon recover. On the morning of October 31st, I was again hastily summoned, as he was choking. On removing the tube it was found free from obstruction, but the difficult breathing continued. A probe touched an obstructing membrane, just below the position of the tube.

After the administration of a hypodermic of whiskey and 1-50 grain strychnine the patient revived somewhat, but was fast becoming exhausted. The case seemed hopeless, and I so informed the friends. Taking from my case a uterine curette that was very flexible, I bent it into a very satisfactory shape and putting it well down along the posterior wall of the trachea it passed the obstruction and with a quick backward motion it removed a membrane as I withdrew the curette. This membrane was an oblong "honey combed" mass which completely filled the lumen of the trachea for $2\frac{1}{4}$ inches by measure.

This procedure had to be repeated twice that day and once the

next, but from that time forward it never returned. There was some sloughing around the incision, but not extensive. I at once gave a full injection of antitoxin. At this time his temperature was 104°, pulse rapid and he was very weak.

I gave him strychnia and a nutritious diet. He passed on to convalescence and soon became rugged and well as any lad of his years. He has had no return of his former attacks of croup. The pitch of his voice was the same for four months, since which time it has returned to normal. The house was quarantined and none of the other children contracted the disease.

Society Proceedings.

BUFFALO ACADEMY OF MEDICINE.

REPORTED BY THOMAS F. DWYER, M. D., Secretary.

THE regular quarterly meeting of the Buffalo Academy of Medicine was held at Alumni Hall, University of Buffalo, Tuesday, September 12, 1899.

The president, Dr. MATTHEW D. MANN, called the meeting to order at 8.45 p. m.

The minutes of the last quarterly meeting were read and approved.

Dr. LUCIEN HOWE presented the following resolutions, which on motion were adopted :

WHEREAS, A resolution has been introduced in the Common Council with the view to greatly modify or to repeal the so-called smoke ordinance, and

WHEREAS, While we would be averse to any unnecessary restriction upon manufacturers in our growing city, still as physicians, we appreciate that the requirements of health are above all business considerations, therefore,

Resolved, That a committee of three be appointed to represent the Academy of Medicine at the hearings on the proposed ordinance with power to advise for or against any of the changes proposed in this ordinance.

The Chair appointed as such committee, Drs. Lucien Howe, William Warren Potter and P. W. Van Peyma.

I r. ARTHUR G. BENNETT presented the following request signed by eleven Fellows of the Academy :

We, the undersigned, members of the Academy of Medicine, in good standing, engaged in the practice of ophthalmology, otology,

rhinology and laryngology, respectfully request that a section of the Academy be established for the study of the diseases and conditions arising in the eye, ear, nose and throat.

It was moved and seconded that the request be granted.

Dr. PRYOR asked the reason for the proposed new section and what effect it might have on the Academy.

Dr. BENNETT in explaining said that a number of the members, who were specialists in those branches desired to have a separate section and did not see how it could possibly injure the Academy in any way. Dr. Howe predicted a failure for the new section if formed and also said it would lessen the attendance at the surgical section without a resulting benefit.

Dr. GROSVENOR moved that the subject matter be referred to the Council and they be requested to report at the next quarterly meeting. Carried.

The section of medicine entertained the Academy with an interesting discourse by Dr. DANIEL R. BROWER, of Chicago, Ill., on The medical aspects of crime, which was illustrated by stereopticon views.

Dr. BROWER said the progress in science, in literature and in arts had been marvelous during the latter end of the nineteenth century. Medicine and surgery have made mighty strides. The insane, the feeble-minded, the deaf, dumb and blind have received in these later years treatment that is scientific and successful. The care of the criminal is the one great question that baffles society, and great difficulties have arisen from the fact that the medical aspects of crime have not been sufficiently considered.

Lombroso and others, in his opinion, have established the fact that the habitual criminal is an abnormal man, the abnormality manifesting itself (1) physically in the criminal physiognomy, in stigmata of degeneration, in anomalies of the muscular, sensory, respiratory and circulatory systems; and (2) psychically in moral insensibility, lack of forethought, low grade of intelligence, vanity and egoism and emotional instability. Statistics showed that crime is increasing throughout the United States in a vastly more rapid ratio than is the population. The two great etiologic factors in the causation of crime are criminal parentage and environment, and quoted the histories of the Jukes family, the tribe of Ben Ishmael, and the descendants of Frau Ada Jurke.

Another important factor in the cause of crime is intemperance. Alcoholics, it is estimated, are the direct or indirect cause of probably 75 per cent. of all the crime committed. Other factors are the

crowding of people together and the raising of children in unhygienic and criminal surroundings, and the criminal laws and their unreasonable execution. The laws are defective, because they are directed against the crime and not the criminal. The study of physiognomy was next mentioned, and is in the opinion of the essayist too much neglected by the physician of the present day. The marks of crime, such as the anomalies of jaw, ear, nose, feet, skin, hair, cranium and brain were thoroughly gone over. The next important aspect is treatment, and as the criminal parentage and environment are the two great causative factors, the treatment should be directed against them. We should prevent propagation by laws regulating marriage and by asexualization. The children of these degenerates should be placed under state control. High license or other methods should be devised to lessen the alcoholic habit. All sentences should be indeterminate; the criminal should be sent to a prison or a reformatory, not for a specific time, but until he is reformed or cured, precisely as a patient is sent to a hospital.

DISCUSSION.

Dr. H. R. HOPKINS said the time has come for the medical profession to speak plainly on this subject, and educate the people into the proper consideration of a criminal as one diseased.

Dr. F. E. FRONCZAK thought we should have a house of detention where persons should be sent to permit them to be examined by medical men. As physician to the penitentiary he had known a number of epileptics to be committed to that institution as drunkards.

Tracy C. Becker, Esq., said the developments of the essayist did not differ much from the experience of most of those who had to do with criminals. The increase of crime in his opinion was due to the influx of degenerates from unrestricted immigration, from indiscriminate marriages and the penal system. He believed that sentences should be indeterminate. Reforms proceed slowly. We had until fifteen or twenty years ago the infamous system of contract labor. This was on the theory that penitentiaries should be self-supporting. It was wiped out principally through the efforts of the labor organisations. The press howled against this and spoke of insanity and the like that would follow criminals remaining idle. Finally, a bill was introduced classifying criminal labor.

Dr. S. A. DUNHAM believed that the increase in criminal statistics was not due to crime, but rather to arrests for drunkenness, which is not a crime, but a disease.

Dr. J. H. PRYOR disagreed with some statements that had been made. The lawyers are liable to be too conservative, the scientists too radical. There is a danger for statistics in examining criminals with a stated idea. He does not believe that marriage can be controlled by law. He also favored a house of detention where people can be sent without mixing with the worst class of criminals.

Judge Truman C. White said he had pronounced notions about criminal law. He believed the law rather than its administration was defective. In his opinion, the theory of indeterminate sentence is a correct one.

Police Justice Thomas S. King said he was opposed to long sentences, excepting for incorrigible criminals. Leniency in first offences lessens crime. He does not agree with the essayist that crime is decreased by long punishment. He is also in favor of asexualisation for habitual criminals.

Dr. BROWER, in closing, thanked the audience for the close attention given him. This is a radical talk and he was not surprised that some differed from him. He thanked the lawyers for their opinions.

Dr. H. R. HOPKINS moved that a vote of thanks be tendered Dr. Brower for his kindness in coming to Buffalo and reading his interesting paper. Carried.

Attendance, 61. Adjourned at 10.30 p. m.

AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS.

(Canadian Practitioner, October.)

THE twelfth annual meeting of the American Association of Obstetricians and Gynecologists took place in the assembly room of the Denison House, Indianapolis, Ind., on Tuesday, Wednesday and Thursday, September 19, 20 and 21, 1899, under the presidency of Dr. Edward J. Ill, of Newark, New Jersey.

The program consisted of a short address by the Mayor, followed by a response of the President on behalf of the Association. Many very interesting papers were presented. Among the essayists were: Drs. J. F. Baldwin, of Columbus; L. H. Dunning, of Indianapolis; L. S. McMurtry, of Louisville; D. Tod Gilliam, of

Columbus; Robert T. Morris, of New York; Edwin Ricketts, of Cincinnati; W. H. Humiston, and M. Rosenwasser, of Cleveland; Walter B. Chase, of New York; Frederick Blume, of Allegheny; J. M. Duff, of Pittsburg; W. E. B. Davis, of Birmingham, Ala.; W. H. Myers, of Fort Wayne; Rufus B. Hall, of Cincinnati; J. F. W. Ross, of Toronto; X. O. Werder, of Pittsburg; H. W. Longyear and J. H. Carstens, of Detroit; W. B. Dorsett, of St. Louis.

Many interesting and valuable discussions took place on various phases of surgery of the kidney; on hemorrhage following celiotomy; on house-to-house operating; on surgery of the liver, gall-bladder and bile ducts; on the treatment of retrodisplacements of the uterus by the various methods, with a comparison of the results satisfactory, unsatisfactory, and dangerous to life. A complete report of the meeting will appear in the *American Journal of Obstetrics*, together with the papers read.

At the banquet held in the evening, Dr. Reamy, of Cincinnati, one of the contemporaries of Fordyce Barker, Eminent Thomas, H. P. C. Wilson, of Baltimore, and others who were the founders of the American Gynecological Society, a courteous gentleman, whose locks have become silvered with years, stated that as a guest of the Association he had listened with amazement to the discussions that had taken place, drinking in with pleasure all that he had heard. He said that, as a link with the past, his position was different to that of the others present; that he was able to compare the old and the new. He considered that the progress that had been made was marvelous and was glad to know that the progress had not yet ceased, but that the hand of the surgeon was still invading new fields for the relief of suffering humanity. The tribute to the work of the Association, in the twelfth year of its existence, coming from such a source and coming with all the freedom of a spontaneous utterance, without any attempt at flattery, must find a sympathetic echo in the breast of every Fellow of the Association, as it is but a recognition of patient toil.

One of the features of the meeting was the memorial address on the life and character of Lawson Tait, delivered by Dr. C. A. L. Reed, of Cincinnati. The Cincinnati *Enquirer* stated that Dr. Reed and Mr. Lawson Tait spent all night in the tower of the National Liberal Club in London, and quoted the last few sentences of a piece of very elegant diction. As the reporter of the *Enquirer* was pleased with this portion of the address, and as it is likely to please some of the readers of the *Practitioner* and show them that

Robert Louis Stevenson does not stand alone in writing rhyme in measured prose, we give it here :

"Mr. Tait was away from the hospital, away from the chamber of sickness, from the hall of controversy," said Dr. Reed, "and thus his great mind revelled in its freedom. England, the Indies, Africa, Anglo-American relations, the recent war between China and Japan, the contrasting features of the occidental and oriental civilisation, the great ethical movements of the world, music, the drama, human happiness, and life itself were themes that he touched with the spark of illumination. As we walked, Big Ben, in Parliament tower hard by, tolled twelve, anon one, and again two. The moon rose and the silhouette of the great city was seen against the tinted sky of the east. The speaker of great thoughts paused to view the majestic scene. I receded a step or two that I might contemplate, in clearer perspective, the more impressive picture of triumphant genius, with the world sleeping at his feet. Thus may he abide in peaceful memory !

[Another feature of the meeting was the presence of Dr. W. Japp Sinclair, of Manchester, Eng., professor of obstetrics and gynecology in Owen's College, of the Victoria University. Dr. Sinclair was president of the section of obstetrics and gynecology at the recent meeting of the British Medical Association held in Montreal. As a guest of the Association he took part in the discussion. Owing to lack of time he will, unfortunately, not be able to visit Canada on this occasion.

The medical profession of Indianapolis tendered a reception to the Association on Tuesday evening, to which all the Fellows and guests were cordially invited. Their courtesy was very highly appreciated by the Fellows.

The next meeting of the Association will take place in Louisville, Ky., under the presidency of Dr. Rufus B. Hall, of Cincinnati.

Progress in Medical Science.

GENITO-URINARY AND SYPHILITIC DISEASES.

CONDUCTED BY BYRON H. DAGGETT, M. D., Buffalo, N. Y.

THE CRUSTACEOUS SYPHILIDE.

OHMANN-DUMESNIL (*The Tri-State Jour. and Practitioner*, February, 1899,) says the syphilides present a density of form and appearance and characteristic distribution. For these reasons diagnosis is beset with difficulties for the inexperienced observer.

Quick perception and aptness in observing details are essential in diagnosis of skin eruptions, together with a systematic and thorough examination. Medication should not be depended upon for diagnostic purposes. The term syphilide is applied to all the cutaneous phenomena, due to syphilis; the term syphilodermata being cumbersome we have syphilides, and by analogy tuberculides and lepnides. The term primary syphilis is not applied to the chancre, but to the secondary manifestations, the molecules, papules and pustules and the skin lesions of the tertiary stage.

Among the syphilitic eruptions of the later secondary period of the disease is the crustaceous form, which is not uncommon, and is frequently found in neglected cases, or cases inefficiently treated. The morphology of the crustaceous syphilide indicates that it is the sequence of some anterior stage, such as a pustular lesion or aggregation of lesions. The crustaceous syphilides may be classified as follows: the disseminated, the small and the large aggregated crustaceous forms.

The crust is well formed and thick and its margins are well defined and shapely drawn; it is roundish or ovalish in shape and there is no surrounding ring of pus as in rupia. The margins are closely adherent to the skin, so that forcible removal causes a little bleeding from the skin when the attachment is broken. In color it is a dirty or dark yellow. When the crust is removed another quickly follows. There is a peculiar, penetrating, sickening odor, characteristic of syphilitic lesions, invariably present. This condition is borne of neglect, poverty and squalor, filth and disease. The disseminated crustaceous syphilide vary in size from a dime to a quarter and are very discreet in their distribution. The margins of the crusts adhere closely to the skin. They are prone to occur on the outer aspects of the limbs or the prominences of the trunk. Its distribution shows a notable degree of symmetry. The separate lesions closely resemble each other in size and conformation. The subjective symptoms are nearly the same in the different varieties.

The small, aggregated crustaceous syphilide differs essentially from the other in a number of features. The crusts are quite small, size of a three cent piece to a dime; there is no spreading process. The crusts adhere tenaciously and they form a distinct patch. They are not confluent; each one is formed on a distinct lesion. This form is frequently asymmetrical, for the location may be determined by some local irritating cause. (This is an exception to the rule of symmetrical distribution of syphilitic skin lesions.)

This form may be mistaken for dermatitis, but a history of the case may clear the diagnosis.

The large aggregated crustaceous syphilide is so marked in its appearance and form that it should not be difficult to recognise it. The crusts are as large or larger than the thumb nail and come close together as if developed about a given point. The crusts which form on prominent surfaces thicken from pressure and irritation. This variety occurs in those who are uncleanly, and who are careless in their personal, moral and social habits, addicted to drink and venery. The crustaceous syphilides present no subjective symptoms, except those roused by accidental causes or traumatism. It is a rule almost without exception that no other syphilitic eruption appears upon the integument in the presence of the crustaceous syphilide. If other forms of cutaneous syphilis appear, such as papules or pustules, they form at points distinct from the location of the crustaceous lesion and quickly disappear and abort.

The crustaceous syphilide is never an early manifestation of syphilis, but is an indication of a later process and an evidence that treatment has been inefficient, inactive or not sufficiently prolonged. The characteristics of crustaceous lesions will give data for estimating the age of the disease, as well as some conception of the treatment which has been pursued. Even if papules and pustules develop in the later stages, they present different characteristics than those in recent syphilides. These are called relapsing syphilides; they are more indurated, are less marked in color and less characteristic in form and symmetry than the secondary syphilides.

Treatment should be very active. Give mercauro, beginning with twenty drop doses and gradually increase to thirty, three times daily, if tolerated, and continue for two weeks; then follow up with potassium iodide, beginning with a 3ss ($\frac{1}{2}$), and gradually increase to ʒi. Continue this also for two weeks. Alternate these remedies with a week's rest. Locally apply an ointment of :

R Hydrarg. oleat, 5 per cent. ʒii.
Ol. amygdal, dil. ʒij.

M. Sig. Three times daily.

A more rapid method is to apply bichlor. hydr. poultices, 1-1000. Wash with sapoderm and powder with nosophen. If an ointment be preferred use :

R Ungt. hydrarg. cinerei.
Hydrarg. oleat., 10 per cent. āā.

The prognosis is good under prompt treatment.

METHOD OF USING PROTARGOL IN GONORRHEA.

DR. J. STEPHAN NAGEL, (*The Plexus*, June, 1899.) on the ground of fifty cases successfully treated with protargol, formulates the following general plan of treatment. The protargol injections should be commenced as soon as the discharge appears and continued as long as the microscope shows any of the gonococci present. The treatment should be started with a one-fourth of 1 per cent. solution in distilled water, to be used in a blunt-pointed hard rubber or glass syringe. The patient is instructed to inject one syringeful every four hours day and night and to retain it in the urethral canal by compressing the meatus for two or three minutes. At the end of five or six days the strength of the solution should be increased to one-half of 1 per cent., and during the following five or six days the interval between the injections should be lengthened to six hours, and the solution retained for four or five minutes. The amount of protargol should again be increased to three-fourths of 1 per cent., the interval lengthened to every eight hours, and the period of retention to six or eight minutes. If at the end of the third week a few gonococci are still present, injections of 1½ per cent. should be used twice daily, to be retained in the morning for ten minutes and in the evening for fifteen minutes. In following up this method of treatment an uncomplicated case of anterior urethritis can, in the majority of cases, be entirely and permanently cured in from fifteen to eighteen days.

ILLEGAL MEDICINE.

Conducted by NELSON W. WILSON, M. D., Buffalo, N. Y.

WEST VIRGINIA and Kentucky have been having seances with illegal practitioners of medicine, and have been invariably successful in the prosecution of the cases.

In West Virginia, itinerant physicians are required to pay a license fee of \$50.00. The osteopaths started in practising in that state secure in the belief that they would not be molested, after having met a series of defeats in Kentucky, which today is the most ably defended state in the Union. It is almost wholly impossible for an illegal practitioner to do business in the blue-grass state.

It remains, however, for a newspaper, the *News*, of Clarksburg, W. Va., to begin a serious crusade against osteopaths, and it starts

off the fight with a severely censorious editorial, the closing sentences of which are as follows :

The laws of West Virginia require that no physician will be permitted to practise until he shall have successfully passed an examination and secured a certificate legally giving him the privilege of following his profession. These new physicians have never passed such an examination and are therefore violating the law, imposing upon the licensed physicians, and appropriating rights which the state has vested in others. If they wish to practise let them take the examination. Judge Thompson held that the word practice, relative to medicine, meant "that branch of science which relates to the prevention, cure or alleviation of diseases of the human body." As osteopathy at least assumed to alleviate and cure disease, it was held to be amenable to the statute. Axtell was fined \$50 and forbidden to practise in Kentucky. The statute of this state provides that manipulation or other expedient shall constitute the act of practising medicine. The penalty for unlawfully practising medicine in this state is a misdemeanor, punishable by the imposition of a fine not less than \$100 nor more than \$500; imprisonment in the county jail not less than one nor more than twelve months, or both at the discretion of the court. It is, therefore, clearly shown that these osteopaths are violating the law. In justice to the profession the law should be enforced.

There are laws in this state which cover all these points, but for reasons, which are in all probability political, there is miscarriage after miscarriage of justice in cases which censors and health authorities bring before the proper tribunals.

AN INDIANA OPINION.

THE newspapers of two weeks ago reported from Frankfort, Ind., the result of a faith curist case which was on trial. A man named Chenowith and his wife were arrested and placed on trial charged with failure to provide medical attendance for their child, which had died without any attention, save that slender thread of hope which faith curists and christian scientists dangle before the eyes of their victims—a flowery prayer, made up of conceit, egotism and blasphemy. The trial had been in progress a week when it was suddenly terminated by Judge Kent, at the close of the prosecution's evidence. The jury was directed to bring in a verdict of not guilty.

The court held that there is no law in Indiana requiring a parent to procure medical attention for his children.

Judge Kent announced from the bench that there never before had been a trial like this in the county.

The state will appeal to the supreme court.

MOTHER EDDY'S WORK ANALYZED.

THE following from the *Medical Record* is an able résumé of an able article :

In the August number of the *North American Review*, Mr. W. A. Purrington continues his consideration of the case against christian science. Taking as his text the proposition that "Publicity will destroy the cult far more quickly than legislation," he proceeds to lay bear the absurdities inherent in Mrs. Eddy's teaching by quotations from her writings. The fact that after a curriculum of only three weeks and on the payment of a fee of \$300, the title of doctor of science was granted at Mrs. Eddy's college to those desirous of receiving that degree and willing to part with the money for that purpose should, if nothing else will, open the eyes of the public both to the ridiculous and the nefarious aspects of the question. Undoubtedly, however, the point that especially appeals to the masses in regard to christian science is the ingenious mingling of religion with the mundane art of healing. Unfortunately religion is and always will be made the cloak for humbug of every description. The conclusions arrived at by Mr. Purrington are as follows :

1. As a mere religious or philosophic theory christian science never would have had any vogue. Its fascination lies in its pretended cures. No one suggests taking action to restrain it as a form of worship. The most that has been suggested in regard to it has been that its ignorant votaries should not be allowed to trifle with the life and health of adults, children, and the entire community by assuming the treatment of all classes of disease, including surgical cases and contagious and infectious maladies. To say that it is an infringement of religious liberty to require the same skill and knowledge of christian scientists engaging in the business of curing the sick for hire as is required by Presbyterians or Catholics in the same business, shows ignorance of the constitutional doctrine of the Mormon case, or carelessness of statement, or such willful misstatement as Mrs. Eddy personally was guilty of when she said infringement of copyright is theft, punishable criminally.

2. Christian science has no healing power peculiar to itself, as distinguished from faith cure or any other method of diverting the mind from the ills of the body. If it had such divine power, its application would be universal; it would be as effective in surgery as in physic.

3. Why is it, then, that christian science is credited with these marvelous cures, if its foremost professors cannot bring forward any better proofs of them than are afforded by certificates no better in manner and degree than those accompanying every quack nostrum that is advertised? The explanation is simple. In perhaps the majority of cases to which physicians are called nothing more is needed than regimen and the mental stimulus that comes to the patient with the knowledge that he is under skilled care. If a physician falls ill,

he calls another to attend him chiefly for the sake of this mental stimulus and to eliminate the personal factor. . . . In all self-limited or feigned cases whatever removes the mental tension may be beneficial. Many patients would get well without any attendance at all. To take an illustration. Childbirth, in which christian scientists profess great success, is not a disease, but the operation of a normal function. In the absence of complications, attendance is not necessary, although it may be desirable. But in the presence of certain complications the very highest skill is necessary to save life. Will any sane person say that because in the vast majority of cases children may be brought into the world safely under the attendance of a christian scientist, such a person is to be pardoned who undertakes such a complication as that of placenta previa with neither medical skill nor knowledge? Will any parent be willing, in case a child's artery is severed, to call a christian scientist rather than a surgeon? Upon the answers to these questions depends the acceptance by reasoning persons of Mrs. Eddy's theory and claim that her followers can cure all forms of human maladies and injuries, and that they should be allowed to treat medical and surgical cases without the responsibility for malpractice that rests upon "medical men." *The Outlook* has these pertinent remarks in regard to the danger of calling in christian science aid to the sick: Suppose a Mormon were to set up as a pilot, claim divine guidance, and insist on his right to take steamships in and out of New York harbor on the strength of his proficiency in the Book of Mormon, would it be a violation of liberty of the individual to prohibit and put him in jail if he persisted? Yet the danger to the community from incompetent pilotage of an ocean steamer would not be so great as the peril from incompetent treatment of certain contagious diseases."

When those members of the public who are apt to believe in the efficacy of christian science treatment can be made thoroughly to understand that a course of three weeks' training is not sufficiently long to render a person, even with spiritual aid, qualified to treat injuries and diseases, and that by employing such practitioners in many instances not only are they endangering their own lives, but also those of their neighbors, perhaps they will pause and ponder.

In the meantime strong measures should be taken to prevent parents and guardians from employing unskilled advice for their children or wards.

A DOCTOR WITH BELIEFS.

DR. N. C. STEELE, of Chattanooga, Tenn., writes as follows to the *Medical Record*. His letter is published in full because it is a literary curiosity and because it shows how queerly christian science affects

the human mind, even when, as in this case there is reason to believe it has had some medical training :

I have just read your article on Faith Curing in Illinois. I am not a christian scientist. There may not be any basis of truth for their claims as to curing people, but I am inclined to think there is such a basis. Of course Mrs. Eddy's book is mostly a conglomeration of nonsense, but the fact that christian scientists cure the sick is what influences people to accept their doctrine or theory as true. As far as human evidence can establish a proposition their "healers" cure as large a proportion of the sick as drug physicians. Or what is the same thing to the sick as the "science," they are made to believe that they are cured.

Another point : I believe in giving sick people medicine, and I take some myself when I am sick. When I am very sick I like to take as little medicine as possible. Now suppose, although perfectly sane, I would conclude that I would not take any medicine at all. Would any person or organisation have any right to make me take it? I think not. I have never heard of such a proceeding.

If my child is sick and I think it should have medicine I effectually insist on its taking the medicine whether the child wants to take it or not. I do this because I feel responsible for the welfare of my child. I do not think the child competent to judge for itself, and so I exercise my judgment for it.

All will probably agree that I am right in this position. All will agree that I have a right to change doctors, and that I have the right to change from a "regular" to a "homeopath" or "eclectic," or the reverse. Some would question my wisdom in thus changing, but no one would think of doing so insane a thing as invoking "the law" to compel me to make a change or not make a change of said doctors. Why? Because they recognise my right to act for my child. Now suppose that for the good of the sick child I dismiss the drug-doctor and call in a faith or mind "healer," one who does not give drugs. At once some one raises the cry that I should be forced to have a "drug-doctor." Is this right? Is it just? Is it sanity? No, it is all wrong. Persuade me, if you can, to have a drug-doctor for myself or child, but don't try to force me to do either. You had better not. The argument used to justify compelling people to have a drug-doctor is that the sick person may die; yes, sir, may die! If a "mind healer" lets a patient die, a great hue and cry is raised against him, just as if no drug-doctor ever lost a case. If a drug-doctor and a "healer" should each treat 100 cases, the patients under each doctor being as nearly similar as possible, and the drug-doctor should lose ten of his hundred and the "mind-healer" should lose only one of his hundred, there would be a great outcry against the "healer" and the family of the dead one, while hardly a remark would be made about the drug-doctor losing ten cases. The verdict would probably be that he had "pretty good

luck" with his 100 cases, or "he did the best he could." Multiplied thousands of people die in New York every year in spite of the best efforts of her many competent and painstaking doctors, and no one thinks anything of it, much less does any one denounce those doctors for letting those thousands die. But if a christian scientist or other "healer" lets one sick person die while being "treated" without drugs, at once every one connected with the case is denounced, and there is talk of "the law," and the incident is published far and near.

The childish absurdity of all this should be plain to every one, but it is not. We are blind worshipers of tradition, faithful trailers in the old ruts, and loyal believers in the sacred and exclusive orthodoxy of drug medication as were our fathers. History repeats itself. Our grand children will smile when they read of our absurdities, eccentricities, and contradictions in these things. If a man wants for himself or child a doctor who does not give drugs, argue with him if you wish, convince him of his folly if you can, but don't talk about forcing him with "the law."

As to the "mind-healer," "faith curist," or "christian scientist" (?) he will not "treat" any cases unless he is asked to do so, and he will not be asked to treat many unless he cures some; and the medicine doctor loses some of the cases treated.

I say all this although I am a strong believer in drugs. I take and give drugs, and if sick I would have a drug-doctor. I plead for justice, fair-dealing and common-sense in this matter.

CHRISTIAN SCIENCE ORDINANCE.

THERE was another hearing before the Buffalo Board of Aldermen Committee on the christian science ordinance on October 19th. The *News* summed up the meeting as follows:

The local christian science controversy, which had its origin somewhere in the remote past and has dragged along ever since, had another link added to its length yesterday afternoon. The aldermen of the committee on ordinances must have contracted the habit of listening to arguments pro and con in the christian science matter, for they have been hearing the same arguments, the same criminations and recriminations over and over again for months, and still, apparently, they crave more.

If the hearing differed from several previous hearings it was in respect to increased bitterness of feeling. Attorney John Cuneen called Health Commissioner Wende a "heartless, unfeeling tyrant." Rev. Dr. O. P. Gifford, pastor of the Delaware Avenue Baptist Church, mercilessly ridiculed the scientists and questioned the honesty of their gains in money, and other ministers demanded that the scientists obey the law as good citizens should.

Mr. Cuneen said that the spirit exhibited by the clergymen was the same one that had sent unfortunate men to the torture and to death and would send them there again if it could. Dr. Henry R. Hopkins in substance gave Mr. Cuneen the lie. Mr. Cuneen in substance told Dr. Hopkins that he was the reverse of a gentleman. Even the soft-voiced and gentle Attorney Tanner permitted himself to give voice to the awful charge that the Health Department has lately shown an "animus."

OBSTETRICS AND GYNECOLOGY.

CONDUCTED BY WILLIAM WARREN POTTER, M. D., Buffalo, N. Y.

URINARY TOXICITY IN PREGNANT WOMEN.

LABADIE-LAGRAVE and others (*Archives générales de Médecine*, May 1899; *University Medical Magazine*) state at the beginning of their article that hertofore the association of urinary toxicity with pregnancy has had reference only to eclampsia; and, that, therefore, there should be instituted a special study of the intoxicating properties of the urine of the pregnant woman without special reference to eclampsia or any other single condition. It should, however, be stated that studies of general scope have been made in this direction for the latter months of pregnancy. The present authors have studied the question from the beginning of gestation, with a view of determining when the urine becomes toxic.

With regard to the first six weeks after impregnation, or rather after the last menstrual period, the normal toxicity undergoes a diminution instead of an increase (which might theoretically have been anticipated); it would therefore appear that this diminution of toxicity may serve as an early sign of pregnancy. If a suspected case of pregnancy exhibits normal toxicity, we may therefore reckon upon the existence of hepatic insufficiency; provided pregnancy is actually present.

If, however, the urinary toxicity is diminished, we cannot at once jump to the conclusion that the woman is pregnant, because this diminution of toxicity is also present in chlorosis, hysteria and tuberculosis. A chlorotic subject undergoes rapid recovery of normal toxicity under appropriate treatment; but if such a patient becomes pregnant the toxicity will not increase under the customary treatment. This is also true of the hysterical and tubercular subject. If patients of this sort do not improve under suitable treatment and

have been exposed to impregnation the failure to regain the normal toxicity is readily explained.

The authors show by a toxicity curve that a given patient had her toxicity lowered in the third month, slightly recovered in the fourth, lowered again in the fifth, partly regained in the sixth, practically unchanged until delivery, the normal toxicity being regained in some six weeks after delivery.

The authors therefore conclude that normally, there should occur a marked lowering of urinary toxicity in pregnancy, and thus whenever this law is violated there is always a definite reason for it, and that if a pregnant woman has a toxicity equal or superior to normal, we should fear the possible development of eclampsia.

CAUSES OF STERILITY.

LEFÈVRE (*La Gynécologie*, August, 1899; *British Medical Journal*) dwells on certain complex causes of sterility. A woman may be barren owing to a single definite pathological condition. Very frequently, however, it is quite otherwise. In eighty-four cases of sterility, observed by Doléris and Lefèvre, several pathological conditions, none of themselves sufficient to prevent conception, were detected in combination in sixty-six. This group of factors together effective in maintaining sterility consists of catarrh of the cervix, conical cervix, stenosis of the os externum, acute ante flexion, and free prolapse of the posterior vaginal wall. Hence treatment should be directed to all these complications, else failure will be certain. The endocervicitis will require the curette, or if the mucosa show intractable changes, amputation of the cervix, after Schröder's method. That operation is also required when the cervix is conical or stenosed, so as to furnish the patient with an os externum wide enough to admit semen. Acute ante flexion is best met by frequent dilatation. If it tend to return, a stem pessary, a colporrhaphy in front of the cervix will be required, whilst posterior colpocele will demand retrocervical colporrhaphy; forty-nine of the sixty-six cases were treated on these principles. In eight the treatment clearly failed. In ten pregnancy has not yet occurred, but either the after-history was too short or there were other factors present accounting for sterility, such as impending menopause (2), uterine fibroid (2), great obesity (1), and the like. There remained twenty-four cases where success was evident, nineteen patients having borne one child, three patients two children, and two patients three children after treatment.

SURGERY.

CONDUCTED BY JOHN PARMENTER, M. D., Buffalo, N. Y.,
Professor of anatomy and adjunct professor of clinical surgery, Buffalo University
Medical College.

AND

NELSON W. WILSON, M. D., Buffalo, N. Y.

THE ESSENTIAL REQUIREMENTS OF A MODERN OPERATIVE PROCEDURE.

DR. L. S. McMURTRY, of Louisville, Ky., delivered the address on surgery at the Chicago meeting of the Mississippi Valley Medical Association, October 5, 1899, selecting for his subject the above title. Among other things he said that during the past fifteen years the province of surgery and its scope have been greatly enlarged. Many diseases and injuries that were formerly treated on the expectant plan and by palliative measures, with little hope of permanent relief or cure, are now cured by judicious surgical intervention. Notwithstanding the increase in hospital facilities in cities and towns, many important surgical cases must receive immediate attention at the hands of the family physician from the very nature and urgency of the disease or accident. Such cases are classified as emergencies and they include many major as well as minor injuries. When a major or minor surgical operation is to be performed certain fundamental principles of asepsis should be observed, and yet it is comparatively exceptional in private homes for minor surgical procedures to be carried out without the presence of pus following the operation.

The speaker said that there are three important steps to be observed: The first is the administration of the anesthetic. This requires skill, which can only be acquired by practice; hence, medical students should receive practical instruction in the administration of anesthetics. The second element of a surgical procedure consists in the control of hemorrhage. In the early days of abdominal surgery it was common to disregard the question of hemorrhage. All those present would remember the days when the drainage tube was more frequently used than it is now, and that within forty-eight hours after an operation it was customary to pump out considerable quantities of blood as the result of oozing from small vessels that were ignored during the operation. Nowadays, when more attention is given to hemostasis, hemorrhage is lessened on account of attention being directed to the small vessels. A third indication, and one to which the speaker devoted the remainder of his remarks, was the important one of asepsis. He gave a detailed statement of the most

modern application of asepsis in the operating room and in the clinic, which was conspicuous all the way through for its simplicity.

THE USE OF GLOVES IN SURGICAL OPERATIONS.

SCHLOFFER (*Archiv. f. klin. Chir.*, Bd. lix., Heft 1; *British Medical Journal*) advocates the use of gloves in the performance of operations which do not demand much manual dexterity or delicate manipulation, and holds that such accessories are likely to be especially beneficial in the practice of surgeons who are unable through constant experience in antiseptic or aseptic methods, or through the absence of skilled assistance, to ensure absolute safety from infection. By the use of suitable and thoroughly disinfected gloves the operator may, in the first place, protect his hands when working on infected structures, against virulent pyogenic agents, and, in the second place, may prevent the transmission to a clean wound of an infective organism that in spite of a vigorous cleansing still remains on his fingers. The author reports favorably of the use in Wolfler's clinic of thin leather gloves, carefully disinfected at first by hot water, and afterwards by prolonged immersion in a 5 per cent. solution of lysol. The wearing of gloves, however beneficial such practice may be found, should not lead to any carelessness in disinfecting the skin of the hands, as it may be necessary in the course of an operation to work with the bare hand. It is stated that the use of operating gloves in Wolfler's practice has been attended with much success, and by a complete absence of those occasional failures that are met with after operations performed with careful observance of ordinary antiseptic or aseptic details.

Selection.

ANEURISM OF THE AORTA.

By W. M. L. COPLIN, M. D., AND E. A. THORNTON, M. D.

[From *Proceedings of the Pathological Society of Philadelphia.*]

LARGE saccular aneurism of the ascending and beginning of the transverse part of the arch of the aorta, showing old rupture into the pulmonary artery, and more recent, fatal rupture into the pericardium; pleurisy, atelectasis, pericarditis.

Clinical history by Dr. Thornton: T. B., male, aged 50 years; occupation, painter. The subject of these notes was addicted to the use of alcohol. He had no symptoms of chronic lead-poisoning, and no lead was ever found in the urine. In September, 1897, he began to experience pain in the precordial region and underneath the sternal notch; the pain also radiated down the left arm. In October of that year he exhibited a pulsating tumor, with all the usual accompanying signs and symptoms of aneurism of the arch of the aorta. He refused to discontinue his occupation, and continued to do the more or less laborious work of a painter, with an occasional lapse of a few days into his old habit of drink. The symptoms all became more pronounced. Dyspnea was at all times very pronounced upon the least exertion, and he had some difficulty in swallowing solid food.

In February, 1898, he consented to give up all work, and was put to bed. Treatment was continued for three months, and at the expiration of this time he was much more comfortable, and the pulsation could no longer be felt, nor could any bruit be heard. One symptom had become more marked—namely, greater difficulty in swallowing solid food. Stress of circumstances compelled him to resume his usual work, which he continued to pursue until within about four weeks of his death, which occurred upon April 2, 1899. On March 1st, during a severe coughing spell, he became faint and was overcome by an attack of syncope, from which he slowly recovered. On March 14th he was taken with an attack of pleurisy with effusion. On March 28th the left chest was aspirated and 1500 c.c. of clear, serous fluid (not blood-stained) removed. During the night of April 1st he was taken with syncope, precordial pain, and greatly embarrassed respiration, quickly followed by death.

Abstract of post mortem notes by Dr. Coplin: Post-mortem held thirty-eight hours after death. Body of man past middle age, fairly well nourished. There was a slight amount of pretibial edema. The subcutaneous fat of the trunk and abdomen was slightly edematous; the musculature of the chest and abdomen on section seemed normal, but slightly pale. The intercostal spaces were prominent on the left side, less so on the right. The peritoneal cavity contained a small quantity of clear, straw-colored fluid.

The left pleura contained 400 c.c. of slightly blood-stained, cloudy fluid. The serous surface was covered by a thin layer of fibrin which was, at points, slightly villous. The right pleural cavity contained 600 c.c. of clear fluid, which was very faintly blood-tinged.

The serous membrane was smooth; there were a number of old adhesions at the apex.

The pericardial cavity contained 700 c.c. of fluid, which was intensely red and contained a number of soft, red, post-mortem clots. The pericardium shows a marked villous, fibrinous deposit, abundantly present over both parietal and visceral layers. At the upper and outer aspect of the pericardial cavity there is an opening fully occupied and apparently closed by a post mortem clot. This opening is slit-like, 2 cm. in length, with ragged edges, and lies immediately adjacent to and parallel with the pulmonary artery. It communicates with a globular tumor continuous with the aorta. This tumor, evidently an aneurism, occupies the superior and middle mediastinum, pressing backward upon the esophagus and bronchi and anteriorly upon the sternum, which was slightly eroded. The sac is apparently globular, its external diameter is 20.5 cm. It is firm over the whole surface. It lies in immediate relation with the upper lobes of both lungs the bronchi and great veins, the esophagus, and two vertebræ, which were slightly eroded, and the sternum.

The thoracic viscera, with the exception of the esophagus were removed *en masse*. The bronchi were not perceptibly collapsed.

There is considerable subpericardial fat, and this, at points, appears to extend into the muscle. The myocardium seems slightly softer than normal, and on section appears to show slight striation or mottling. The cavities of the heart are moderately distended, the right more than the left. The orifices and valves of the right side are normal. The mitral valves show slight thickening with atheroma at the base. The aortic orifice transmits four fingers. The valves show some old fenestræ above the line of contact; they are slightly thickened, and show some atheroma and fibrous thickening extending into the sinuses of Valsalva. The coronary arteries are normal. Beginning 1 cm. from the aortic orifice there is a globular mass completely surrounded by a laminated white thrombus. Anterior to the right side of the cavity the thrombus is much thicker. The cavity occupied by the thrombus measures 16.5 cm. in diameter; its wall aside from the laminated thrombus is about 4 mm. in thickness; the disparity between the external and internal measurements is due to a slight reduction in the size of the mass after opening. Anteriorly and to the right the thrombus is 8 cm. in thickness, while to the left and over the pulmonary blood-vessels it is less than 1 cm. in thickness. Just over the pulmonary artery it is barely 0.25 cm.

in thickness and communicates with the pulmonary artery, 4 cm. from the pulmonary orifice, by an irregular, jagged, button-like projection for about 1 cm. The opening in the pulmonary artery is 1.5 cm. in length, but on attempting to remove the thrombus this opening is extended to a distance of 3 cm.; apparently the wall of the pulmonary artery has been replaced by the thrombus; 1 cm. external to this opening is the opening into the pericardium, already referred to. The canal through the thrombus is a flattened cylinder, ovoid on transverse section, which barely transmits three fingers, measuring 6.5 cm. in width by 1.5 cm. in the opposite direction. The aorta immediately above the valves shows considerable atheroma; where it leaves the aneurism it is narrowed into a circular orifice, which barely transmits the index finger. The orifice is surrounded by a densely thickened band which cuts with very great resistance. The lower part of the thoracic aorta is normal. The heart, pericardium, and fragments of thrombi weigh 1880 grammes.

Both lungs showed areas of atelectasis with considerable hypostatic congestion. The bronchial mucosa was red and edematous, and many of the smaller bronchi were apparently occluded by plugs of mucus. With the exception of a slight degree of red atrophy of the liver and a moderate amount of induration in the kidneys the other organs show nothing worthy of special consideration.

Multiple ruptures of an aneurism are not extremely uncommon. Rupture into the pulmonary artery must be very rare. Rupture into a pulmonary vein is not so infrequent. That the rupture into the pulmonary artery is old, and the rupture into the pericardium recent, is easily demonstrated. Whether the rupture into the pulmonary artery dates back to the period when the patient first went to bed, February, 1898, or whether it occurred at the beginning of his last illness cannot be accurately determined. The rupture is not in a condition which would enable one to say, with any degree of definiteness, as to when it occurred; it must, however, have been a question of some weeks. It is possible that the fainting spell which occurred on March 1st may have been due to the sudden establishing of communication between the aneurism and the pulmonary artery.

CURED.—He—I was cured by the faith cure.

She—What was your ailment?

He—Faith in the faith cure.

—*Brooklyn Life.*

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges should be addressed to the editor: 284 FRANKLIN STREET, BUFFALO, N. Y.

VOL. XXXIX.—LV. NOVEMBER, 1899.

No. 4.

FALSE REPORTS CREDITED AS MILITARY NEWS.

TWO former soldiers of the 13th U.S. Infantry who were discharged in Manila and returned to the United States on the transport Newport, arrived at Buffalo a few days ago, and at once hunted up a newspaper reporter and proceeded to give him harrowing tales of neglect, cruelty, lack of medicine and surgeons, and poor food. They also gave it as their opinion that General Otis was not capable of conducting a successful campaign. Briefly, their statements regarding the medical department of the army were to the effect, that amputations were performed without anesthetics; that the surgeons neglected the soldiers; that men died for want of care and medicine; that the food on the transport was poor; that it was worse in Manila; that there was not a medical officer on the transport; that there were no drugs even; that the undertakers embalmed the men who died en route in the same room with the men, and while meals were in progress, and that in embalming, the undertakers cut the dead "across the abdomen," and "threw parts of the body overboard." In substantiation of their statements regarding the lack of medicine and surgeons on board the transport, they relate an incident, wherein an enlisted man "who was an English doctor" wrote a prescription and gave it to the steward, who handed him back a bottle of colored fluid, which the "English doctor" on sight declared to be not the proper mixture; whereupon the steward "confessed" that there were no drugs on board the vessel.

Naturally, the newspapers printed long, sad tales of the horrible cruelty to the soldiers, and made very delicious Atkinsonsque morsels for the "haul down the flag" people to roll under their tongues.

It is hardly necessary, so far as scarcity of drugs is concerned, to call attention to the supplies sent to the Philippine Islands by the

Surgeon-General of the Army, as published in the JOURNAL two months ago. There are officers of the medical corps detailed at San Francisco and Manila, whose sole duty is to inspect and refit each transport before it leaves on a voyage. Each transport has its complement of medical officers and a full supply of drugs. As for any hospital steward in any branch of the service of the United States army, navy or marine hospital corps, receiving and filling a prescription written by an enlisted man, for use by another person, the statement on its face is preposterous. The balance of the medical statements hardly need reference.

There has been in this campaign, as there has been in every other past campaign, and as there will continue to be in other campaigns to come, just such wild statements made by disgruntled soldiers and anti-expansionists and kickers. But, in all the swirl of war time criticism, just or unjust, Surgeon-General Sternberg's department has been above reproach. He has supplied excellent medical service to the men, and the drug supply has been ample. This is shown by the equipment of the volunteer regiments, each of which has been given an outfit sufficient to medicate a brigade--a regimental outfit, which in the civil war would have been a God-send to an army division, and a blessing to an army corps. Sherman said, "war is hell." It remains for some equally terse and epigrammatical gentleman to properly classify these persons who are deliberately lying about medical equipment and surgeons' cruelty and snarling at the flag.

HOW MICHIGAN DEFINES THE PRACTICE OF MEDICINE.

THERE is a doubt in the minds of many people as to what constitutes the practice of medicine in its technical and legal sense. Some are of the opinion that if a person does not administer drugs in the attempt to cure disease he or she does not technically "practise," hence all faith healers, rubbers, masseurs, *et id genus doctores*, are exempt from the restriction that the law places around educated men and women who possess the doctorate degree and the state license to practise, both regularly obtained.

In the State of Michigan this question has lately been raised and the secretary of the state board of health referred it to the Attorney-General for an opinion. We take pleasure in publishing the opinion in full, hoping it may contribute to the solution of this vexed question.

EVERY PERSON WHO ACTS AS A PHYSICIAN MUST REPORT EVERY
DANGEROUS CONTAGIOUS DISEASE TO THE HEALTH OFFICER.

OPINION OF THE ATTORNEY GENERAL.

HENRY B. BAKER, *Secretary State Board of Health, Capitol.*

My Dear Sir—Your letter of recent date received. You ask whether or not a person practising "a system known as christian science," is or is not a physician, or acting as a physician, and therefore liable, under section 1676 of Howell's statutes, as amended by act 11, laws of 1883, and act 150, public acts of 1895, for not reporting diseases to the health officer of the township, city or village, as required by law. Said act as amended requires that :

"Whenever any *physician* shall know that any person whom he is called to visit, or who is brought to him for examination, is infected with small-pox, cholera, scarlet fever, or any other disease dangerous to the public health, he shall immediately give notice thereof to the health officer of the township, city or village in which the sick person may be; and to the householder, hotel keeper, keeper of a boarding house, or a tenant within whose house or rooms the sick person may be. The notice to the officer of the board of health shall state the name of the disease, the name, age, and sex of the person sick, also the name of the physician giving the notice; and shall, by street and number, or otherwise, sufficiently designate the house or room in which said sick person may be. And every *physician and person acting as a physician*, who shall refuse or neglect immediately to give such notice, shall forfeit for each such offense a sum not less than ten nor more than fifty dollars," etc.

It is plain from the wording of the above section of the act that it applies to physicians as such, or persons acting as physicians. The question, therefore, hinges on whether or not a person employing "a system known as christian science" is or is not included under the above terms. If such a person is included under the term "physician" or "acting as a physician," he would be required to make the report, otherwise he would not.

I will first take up the construction of the word "physician." In section 3 of act 237, public acts of 1899, entitled :

"An act to provide for the examination, regulation, licensing, and registration of physicians and surgeons, and for the punishment of offenders against this law, and to repeal acts and parts of acts in conflict therewith."

I find it clearly defined who shall be physicians in this state, *i. e.*, who shall be allowed to practise medicine and surgery therein, requiring that all such persons shall pass a certain examination given by the board, together with other conditions, or be a graduate of certain medical schools, whereupon they shall be entitled to be registered, and receive a certificate of registration, which shall entitle them to practise medicine in Michigan.

Bouvier says :

"A physician is one *lawfully* engaged in the practice of medicine."

This is also the common and accepted meaning of the term. It follows, therefore, that unless a person has received such a certificate entitling him to lawfully practise, he is not a physician in the State of Michigan, and will be liable for holding himself out as such under section 7 of the act in question, which section reads, in part, as follows :

"Any person who shall practise medicine or surgery in this state, without first complying with the provisions of this act, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not more than one hundred dollars, or by imprisonment in the county jail for a period of not more than ninety days, or by both such fine and imprisonment, for such offense," etc.

Section 9 of act 237, also provides :

"When any person shall append the letters M. B. or M. D., or prefix the title "Dr." or doctor, or any other sign or appellation in a medical sense to his name, it shall be prima facie evidence of practising medicine and surgery within the meaning of this act."

Taking the definition of Bouvier, and the Encyclopedia of Law, that : "A physician is one lawfully engaged in the practice of medicine," together with sections 3, 7 and 9 of act 237, it seems that the clear intention of the legislature is, that only such persons as have received the necessary certificate from the board of registration are to be considered physicians in the State of Michigan. It is my opinion, therefore, that a person employing "a system known as christian science," unless he be lawfully registered as a physician, is not a physician, and cannot be included under the term "physician," as used in the act under consideration.

This brings us to the words "acting as a physician," the question being, whether they or not would include a person practising "a system known as christian science." The evident intention of the legislature in adding this clause was to broaden the meaning of the section in order that it may include persons not physicians, and thus bring within its construction all those cases which might otherwise fail to be reported. The question is, then, who did the legislature intend to include in the words "acting as a physician?" I think that they are capable of a very wide meaning, and if it was the intention of the legislature to give them this wide meaning they should be so construed. The evil sought to be overcome by the statute is the danger to public health and life due to the failure of physicians and persons acting as physicians, to make a report of diseases which they undertake to treat, in order that the public may be warned, and such disease may be properly confined. If this was the intention of the legislature, which I think it was, it follows that any person who takes charge of and attempts to treat any of the contagious diseases mentioned in the statute, whatever the means, would be liable for not making the report as required by the act. This would include a person employing "a system known as christian science."

Yours respectfully,

(Signed) HORACE M. OREN, Attorney-General.

MORTALITY STATISTICS IN THE TWELFTH CENSUS.

THE importance of securing accurate mortality statistics is well understood by all physicians and by most public men. One of the greatest difficulties in the way of obtaining accuracy is the want of uniformity in the system of mortality registration throughout the country. To obviate this the Hon. William R. Merriam, director of the twelfth census, has sent out a circular appealing to physicians and medical journals to coöperate with the census bureau in its effort to secure uniformity. The circular contains a form of death certificate, suggested by the statistician of the census, which we believe is worthy of adoption by all health officers in the United States. This improved form should be put into use for the calendar year 1900, which is the period selected for the collection of mortality returns.

The circular is a lengthy one, which should be obtained and read by all physicians; meanwhile, we present a synopsis of it prepared by the census office, as follows :

Physicians and students of mortality statistics will be interested in learning of the work now being accomplished by the chief statistician of vital statistics of the United States census, by the authority of the director, Hon. William R. Merriam. It is a practical effort, necessarily of limited scope, to secure the adoption of a uniform certificate for the return of deaths and looking toward the establishment of a common national system of collection of vital statistics for the purpose, primarily, of the census tables and publications.

Correspondence has been had by the chief statistician, Mr. William A. King, with the officers in charge of mortality registration in the states employing such a system, and in the cities having a population of 5,000 and more at the last census, which also collect and register death returns. Complete and accurate information of the different methods in vogue has been obtained, and it was found that there is much unnecessary and objectionable variation, considered from the census point of view, in the form of official returns.

Having no power to compel coöperative action and hampered by want of time in which to carry out the whole project, nevertheless the census office undertook to secure the modification or amplification of the death certificates so as to have them include the items necessary to obtain census data. A model return form was prepared and submitted, with explanatory correspondence, to each registration office or officer controlling the preparation of the state or local forms.

The result has been more important and gratifying than even the census office expected, as not only have the items in the specimen form been very generally adopted, but the registration officers have abolished many practically obsolete local variations in their certificates, and the latter have been made to conform to one standard more nearly than ever before.

The promptness and willingness displayed by the state and local officers in complying with the request of the director has been surprising as well as gratifying. The benefit that will result to the census office and to science from this first step toward the goal of national uniformity is incalculable, but it will be seen readily that the study of the natural law of the growth of the population is made easier and more certain.

The director of the census confidently expects that physicians everywhere will appreciate the desirability of the new order of things, and that they will earnestly and actively coöperate in securing prompt and accurate mortality returns of the uniform character required by congress and sought for by statisticians. He recognises the fact that failure on the part of physicians to give vitality to the common standard by carefully reporting the items that may be new to their certificate will be fatal to the end in view.

THE Buffalo Commercial in a recent issue thus calls attention to one of the entirely inexcusable annoyances of this city :

Is it absolutely necessary for public health and comfort that garbage shall be collected from private residences at five o'clock in the morning, and that the collectors should make a point of waking up every man, woman and child in the block? Is there any mysterious, logical or inevitable connection between such an infernal racket, and public health and cleanliness?

This is a matter of which the JOURNAL has spoken repeatedly. It is a vexation to the well. It is a positive injury to the sick, to whom the sleep of the early morning hours is of almost vital importance. A little agitation in the daily press might result in doing away with one of the minor ills of city life. It takes a very long time for people to learn how much noise is unnecessary. Collectively the race is not so advanced as the individual and in the matter of city noises it is yet in its childhood.

AN INKLING of the backwardness of the Boers may be had from the newspaper accounts of the English campaign in the Transvaal, where in an official report it is stated that the British had captured a Boer hospital "equipped with the most primitive appliances."

THE ordinance requiring the muzzling of all dogs in the City of Buffalo went into effect on Wednesday, October 25, 1899. Violation of the ordinance is punishable by a fine of from \$25 to \$100.

This may have the effect of stamping out the epidemic of rabies, which seems to have made Buffalo its headquarters. A most interesting statement made in connection with this state of affairs is that the rabies originated in Ontario, Canada. We are of the opinion, however, that it is not possible to trace the source of the outbreak.

THE christian scientists of Buffalo are still holding out their prayer, rugs and waiting for the aldermanic committee's report on the health commissioner's ordinance. The report will not be made until after the votes are counted and then the christian scientists will begin to report the cases of infectious and contagious diseases which they are praying over and getting money from.

PERSONAL.

DR. JAMES WRIGHT PUTNAM, of Buffalo, was lately made consulting neurologist to the Craig Colony for epileptics, recently established by the State of New York, at Sonyea. The board of managers have exhibited a progressive spirit in creating a consulting staff, and we congratulate them on this new appointment.

DR. WILLIAM HOUSE, of Buffalo, is in the west, where he expects to spend a year in travel, living an out-of-door life, principally on the Pacific slope. He expects to return to Buffalo and resume the practice of his profession early next autumn.

DR. JOSEPH H. ROBISON, of Bradford, Pa., University of Buffalo, 1895, and Miss Lettie R. Galbraith, of this city, were married at the Church of the Good Shepherd, October 4, 1899. Dr. Robison was formerly one of the internes at the Erie County Hospital. Dr. and Mrs. Robison will reside at Bradford, Pa.

DR. ABRAM T. KERR, adjunct professor and demonstrator of anatomy at the University of Buffalo, is temporarily residing in Baltimore. He will be engaged for some time in special anatomical work at Johns Hopkins University.

OBITUARY.

DR. CLIFTON G. SMITH, University of Buffalo, 1887, died at Akron, O., October 2, 1899, aged 35 years.

WILLIAM H. APPLETON, ESQ., the whilom senior member of the house of D. Appleton & Company, of New York City, died at his home, Thursday, October 19, 1899, aged 85 years. The *New York Medical Journal* in referring to Mr. Appleton's death very justly remarks that he was a sterling friend of the medical profession, numbering among it many close friends.

SOCIETY MEETINGS.

THE New York State Medical Association held its sixteenth annual meeting at the New York Academy of Medicine, 17 West 43d Street, New York City, Tuesday, Wednesday and Thursday, October 24, 25 and 26, 1899, under the presidency of Dr. Joseph D. Bryant, of New York City. It was a well attended and interesting meeting, and a large number of excellent papers were read.

On Tuesday evening a discussion was had on Medical expert testimony, participated in by the Hon. Willard Bartlett, Justice of the Appellate Division of the Supreme Court; the Hon. Joseph F. Daly, formerly Justice of the Supreme Court; Charlton T. Lewis and William A. Parrington, Esquires, of the New York Bar, and by Dr. Theron A. Wales. On Wednesday afternoon a discussion on typhoid fever was had under the following titles:

1. The advance in our knowledge of typhoid fever, by Herman M. Biggs, of New York City.
2. Bacteriology of typhoid fever, by W. H. Park, of New York City.
3. Clinical diagnosis of typhoid fever, by William Osler, of Baltimore.
4. Statistics of typhoid fever at the Roosevelt Hospital for ten years, by W. H. Thomson, of New York City.
5. Typhoid fever in the Massachusetts General Hospital during the past fifty years, by Reginald Fitz, of Boston, Mass.
6. Some phases of typhoid fever as seen in Bellevue Hospital, by A. A. Smith, of New York City.

7. Typhoid fever in children, by Abraham Jacobi, of New York City.

8. The local—non-surgical—treatment of the intestinal tract in typhoid fever, by De Lancey Rochester, Buffalo.

9. Treatment of perforation of the bowel in typhoid fever, by W. W. Keen, of Philadelphia.

10. Eye complications in typhoid fever, by A. A. Hubbell, of Buffalo.

11., by E. G. Janeway, of New York City.

Wednesday evening, 9.30 to 11.30 o'clock a reception was given at the New York Academy of Medicine to William W. Keen, M.D., LL.D., president of the American Medical Association and to Prof. Reginald H. Fitz, of Boston, and Prof. William Osler, of Baltimore.

THE Mississippi Valley Medical Association held its twenty-fifth annual meeting at Chicago, October 3-6, 1899. It was considered the most successful meeting in the history of the organisation. The attendance was large and the discussions were spirited. It was determined to publish a volume of Transactions that will be issued promptly. The following were appointed a committee on publication: Drs. Henry E. Tuley, Dudley S. Reynolds and Lewis S. McMurtry. The executive committee has ordered that no volume be sent a member who is in arrears for dues.

The following officers were elected for the ensuing year: President, Harold N. Moyer, Chicago, Ill.; first vice-president, A. H. Cordier, Kansas City, Mo.; second vice-president, S. P. Collings, Hot Springs, Ark.; secretary, Henry E. Tuley, Louisville, Ky.; treasurer, Dudley S. Reynolds, Louisville, Ky. Chairman of committee of arrangements, M. H. Fletcher, Asheville, N. C.

The twenty-sixth annual meeting will be held at Asheville, N. C., October 9-11, 1900.

THE Southern Surgical and Gynecological Association will hold its twelfth annual meeting at New Orleans, La., Tuesday, Wednesday and Thursday, December 5, 6, and 7, 1899, under the presidency of Dr. Joseph Taber Johnson, of Washington, D. C. The secretary, Dr. William E. B. Davis, of Birmingham, Ala., is preparing an excellent program for the occasion, and the delightful weather prevailing at this season in New Orleans ought to and no doubt will ensure a large attendance.

THE American Public Health Association is holding its twenty-seventh annual meeting just as this JOURNAL is reaching its readers—namely, October 31st to November 3, 1899, at Minneapolis. We have not seen a preliminary announcement of the meeting, but presume it is planned on the usual lines. Dr. Ernest Wende, Health Commissioner of Buffalo, is in attendance, representing the public health interests of this municipality.

THE Surgeons' Association of the Western New York & Pennsylvania Railroad, held their seventh annual meeting at Dunkirk, October 11, 1899, and elected the following officers: President, George E. Ellis, of Dunkirk; vice-president, James V. Otto, of Port Allegany, secretary and treasurer, E. M. Dooley, of Buffalo; committee on arrangements, G. E. Ellis, Dunkirk, chairman; J. C. Clark, of Olean, and J. A. Richey, of Oil City, Pa.

A number of Buffalo surgeons read papers on subjects of interest to the Association.

Among the physicians in attendance were: P. L. Van Allen, L. J. McAdam, C. M. Daniels, J. A. Sheridan, Buffalo; William H. Gail, East Aurora; G. E. Ellis, Dunkirk; C. W. Coulter, William Forster, S. W. McDowell, J. P. Strayer, P. M. Speer, J. M. Ward, J. A. Ritchey, F. F. Davis, E. W. Mutheman, I. P. Heindell, Oil City; James V. Otto, Port Allegany, Pa.; Benjamin Chadwick, Smethport, Pa.; J. C. Clark, B. J. Wilmoth, Olean; E. L. Dickey, St. Petersburg, Pa; George H. Kenyon, Providence, R. I.; J. M. Hamilton, Oakmont, Pa.; J. W. Moujar, W. C. Tyler, Rouseville; William Varian, Titusville.

The next annual meeting is to be held in Olean.

THE Medical Society of Virginia held its thirtieth annual meeting at the Jefferson Hotel, Richmond, Tuesday, Wednesday and Thursday, October 24, 25 and 26, 1899, under the presidency of Dr. Jacob Michaux, of Richmond. A large number of valuable papers were read and the usual executive business was transacted.

THE Medical Association of Central New York held its thirty-second annual meeting at the Yates Hotel, Syracuse, N Y., Tuesday, October 17, 1899, beginning at 10 o'clock in the forenoon. A large attendance of the physicians of Central and Western New York was

noted and the meeting was a success. Many interesting papers were presented and read. The discussions were animated and interesting and the best of fellowship prevailed. A dinner was given to the visiting members at the Yates and a complimentary banquet was tendered those of the visitors who sojourned in Syracuse until the late trains.

The officers elected for the year were : President, John Gerin, of Auburn; first vice-president, Lucien Howe, of Buffalo; second vice-president, A. L. Beahan, of Canandaigua; secretary, Charles A. Vander Beek, of Rochester; treasurer, S. L. Elsner, of Rochester. The next meeting will be held at Rochester the third Tuesday in October, 1900. The papers read and presented at the meeting will be published as usual in the *BUFFALO MEDICAL JOURNAL*.

THE Buffalo Academy of Medicine held meetings during the month of October as follows :

Section on Surgery.—Tuesday evening, October 3d, program : A report of the operative treatment of several cases of frontal and maxillary sinusitis, Frank W. Hinkel; Subphrenic abscess, Prescott LeBreton.

Section on Medicine.—Tuesday evening, October 10th, program : Malaria, Irving P. Lyon; discussion by Charles G. Stockton, Marshall Clinton and John D. Howland.

Section on Pathology.—Tuesday evening, October 17th, program : A case of polienccephalomyelitis in an adult, presenting the clinical symptoms of Landry's paralysis and terminating fatally in nine days, Dewitt H. Sherman; discussed by James W. Putnam and William C. Krauss. The significance of chronic rhinitis in relation to ocular affections, Edmund E. Blaauw.

Section on Obstetrics.—Tuesday evening, October 24th, program : Pus in the pelvic cavity, Dr. Herman E. Hayd.

COLLEGE AND HOSPITAL NOTES.

A NEW hospital is building at Richmond, Va, which will, when completed, cost considerably more than \$100,000. It will be admirably located at the corner of Twelfth and Broad Streets, where ample ground has been secured. The work of removing the buildings at

present located thereon will soon begin. In a reasonable time the structure, which is to shelter the noble charity, will have been erected and its doors thrown open for the reception of patients.

The *Richmond Dispatch*, of September 28, 1899, in giving a detailed description of the site and the plans of the projectors says :

The corporators of the company are Messrs. R. S. Bosher, John L. Williams, E. T. D. Myers, William R. Trigg, John Skelton Williams, E. Randolph Williams, E. L. Bemiss, W. M. Habliston, C. W. Tanner, Fred Nolting, Dr. George Ben Johnston, and Dr. Christopher Tompkins. It would be difficult to obtain Richmond men of surer standing in the world of business, or in the professional world.

The institution will be of size sufficient to accommodate 150 patients. This includes the charity wards as well as the private rooms. Of course, like all such institutions, the hospital will be open both to patients who are able to pay for a private room and special attendants, as well as to the poor devil who hardly has where to lay his head when well and no rainy-day sum to pay the cost of a long illness.

The hospital will be under the control of a board of trustees. Medical and surgical service will be rendered by the staff of the Medical College of Virginia exclusively, except, of course, when other physicians and surgeons are especially invited to lend their assistance.

The establishment of this hospital marks the inauguration of the greatest charity Richmond has ever known. At present the Almshouse is the only city hospital in existence. The need of an ample modern hospital, where the unfortunate poor of the city may be treated has been felt for many years. The city has not been able to establish a charity hospital. The philanthropy of her citizens will do that which the municipality could not do.

Dr. George Ben Johnston, one of the corporators, and among the best known surgeons of America, stated last night that the hospital would be as thoroughly equipped as any in existence. Every scientific appliance known to medicine and surgery will be at the hand of the men who will have the hospital in charge. In this connection it should be stated that Dr. George Ben Johnston and Dr. Ennion G. Williams have been chiefly instrumental in inaugurating the movement for the establishment of the hospital.

Dr. Christopher Tompkins, who is the other physician among the corporators, a professor in the Medical College of Virginia, and one of the best known doctors in the city, stated to a *Dispatch* writer last night that the senior member of the well-known firm of architects of this city, Messrs. Nolting & Baskerville, had been in New York and Philadelphia some time this summer studying the forms of hospital architecture to be found there, with a view to applying his ideas in the plans for the great Richmond institution. However, an architect has not been engaged, and plans have not been adopted.

It is hardly possible to exaggerate the importance of the establishment of this great charitable enterprise in Richmond. Its establishment seems the climax of an era of unprecedented prosperity in the history of the city. Heretofore development along industrial lines has chiefly characterised the ushering in of the new era. It is a cause for sincere congratulation that charity is not to be forgotten by those who are making Richmond take such a high place in the world of business.

A VACANCY having occurred in the superintendency of the Utica State Hospital by the resignation of Dr. G. Alder Blumer, a civil service examination has been held to determine the qualifications of his successor. As a result the following-named candidates have been declared eligible, ranking in the order named: Harold Palmer, State Hospital, Utica; Henry P. Frost, State Hospital, Buffalo; William L. Russell, State Hospital, Willard; Jelvin Courtney, Hudson River State Hospital, Poughkeepsie. The first named has been appointed.

THE department of anatomy at the University of Buffalo has been enlarged considerably of late. The staff of teachers as now constituted is as follows: John Parmenter, professor of anatomy and clinical surgery; William C. Phelps, professor of surgical anatomy; Abram T. Kerr, adjunct professor and demonstrator of anatomy; James A. Gibson, assistant demonstrator of anatomy; James E. King, N. C. Russell, William House, Norman L. Burnham, Laurence Hendee, Amos T. Baker, Marshall Clinton, Herman K. DeGroat and Jacob Otto, assistants in anatomy.

A HOSPITAL at Batavia has long been talked of and still longer needed. Lately, however, there seems to be some prospects of crystallisation of the plans. Dr. B. F. Showerman has taken hold of the matter in earnest and has great hopes of success. He recently outlined his general plan to a reporter of the *Buffalo Evening News*. Among other things he said :

The management of the hospital is to be in the hands of a board of managers composed of doctors in this village. Every physician, who has a patient who has purchased a ticket entitling him to admission to the hospital, will have the right to take him there and treat him, either prescribing or furnishing the medicines needed, and will charge for his professional services just the same as if the patient was in his own home.

In cases of accidents, or if the person is unable to pay, let the village pay for his care, or let the churches or some society or

benevolent person subscribe money to endow cots for such emergencies.

No one must expect that he can buy a ticket and be admitted to the hospital after he is sick. He must purchase his ticket when they are issued or before he becomes ill. The object of this enterprise is to insure a person a place to go and be care for during sickness, and not to give them that privilege after they have become sick.

The cost of equipping such a hospital, as I have described, and running it for one year would be about \$6,000 or \$7,000. It would probably cost nearly that amount the second year, but after that I think it could be run for \$5,000 a year. I know of no reason why one or two thousand tickets should not be sold at once.

The well-know enterprise of Batavia ought to be a guarantee of the success of this plan. The necessities for such an institution are great, and the project as outlined is just and comparatively inexpensive.

THE governors of the New York Skin and Cancer Hospital, Second Avenue, corner 19th Street, announce that Dr. L. Duncan Bulkley will give a second series of clinical lectures on diseases of the skin in the outpatient hall of the hospital, on Wednesday afternoons, commencing November 1, 1899, at 4.15 o'clock. The course will be free to the medical profession.

For several years past Dr. Bulkley has endeavored to utilise the clinical material at the dispensaries for the benefit of the general profession, and last year a series of lectures were given that were well attended. Every physician interested in the study of this special branch of medicine will find these lectures most helpful.

Book Reviews.

HANDY BOOK OF MEDICAL PROGRESS. A lexicon of the recent advances in medical science. By CHARLES WARRENNE ALLEN, M. D., Consulting Dermatologist to the Randall's Island Hospitals, and JACOB SOBEL, A. B., M. D., Dermatological Assistant at the Good Samaritan Dispensary. New York: William Wood & Co. 1899.

So rapidly do the advances in the various branches of medical science multiply, that one finds it an almost impossible task to keep abreast of the times without the aid of what might be called concentrated literature. In fact the busy practitioner is obliged to fall back upon such publications to keep him informed of what medical science is doing. So many new words are introduced and coined almost daily that find their way into text-books, encyclopedias and

dictionaries, that unless he has some key to their solution he is in absolute darkness. For these reasons the authors have been led to compile a volume arranged alphabetically, giving so far as possible the meaning of new terms, and value of new discoveries in the realms of practical medicine.

Great care and skill has been shown in the enumeration of new medicines and only those which have been kindly received by the profession and shown their good qualities have been incorporated. The formulæ of many of the more important compounds are given, as for instance, Schleich's chloroform mixture, ammonal, antiseptin, antikamnia, bromidia, castoria, camphoid and the like. The formulæ of the various staining mixtures in histology, pathology and bacteriology are also given. The different tests, surgical suggestions and names of new symptoms and new diseases, and new instruments are all briefly described.

It is, in short, a most useful adjunct to the medical dictionary and furnishes a means of rapidly and conveniently acquiring information relative to the newer advances.

The paper and print are excellent, the size convenient, all attesting to the good name of the publishing house whence it came.

W. C. K.

A TEXT-BOOK OF MECHANOTHERAPY. (Massage and Medical Gymnastics.) Especially prepared for the use of medical students and trained nurses. By AXEL V. GRAFSTROM, B. Sc., M. D., late Lieutenant in the Royal Swedish Army; late House Physician City Hospital, Blackwell's Island, New York. With eleven pen-and-ink sketches by the author. Philadelphia: W. B. Saunders. 1899.

This little book will doubtless be of considerable service to the trained nurse who wishes to know more of medical gymnastics and massage than the somewhat incomplete training in these branches which most hospitals give. The author describes in detail the various movements of both massage and gymnastics and illustrates various procedures by original drawings. The application of mechanotherapy to various diseases occupies about one-third of the volume.

M. J. F.

AN INTRODUCTION TO DERMATOLOGY. By NORMAN WALKER, M. D., Fellow of the Royal College of Physicians of Edinburgh; Assistant Physician for Diseases of the Skin to the Royal Edinburgh Infirmary. With a frontispiece, twenty-nine plates and thirty-four illustrations in the text. Octavo volume, 250 pages. Price, \$3.00. New York: William Wood & Co.

A book of this kind may find readers among physicians, but should not among students. It conveys much of the latest information concerning the subject of which it treats, even upon disputed points, a fact which might lead the mere student to dangerous conclusions. It was the publisher's idea to prepare the best and cheapest rudimentary book in the English language. Of course no publication can readily usurp the place occupied by Jackson's masterly hand-book

upon Diseases of the skin, or successfully compete with Hardway's Manual. Had this author given the essentials of all diseases, refraining from the expression of mere personal experience, his book would have been stronger, more reliable and more useful. Furthermore, his quotations from Unna are quite too frequent, betraying more partiality than discretion. In short, the work is not for the student, but for such physicians as are especially interested in the subject treated. The whole manner and matter of the book is far too advanced to justify its claims to be considered as a treatise upon introductory dermatology.

A striking feature of the work consists in the limited number of American authors quoted. This is unjust to the very many who have done so much in establishing the well formulated principles of dermatology. The only person who has been freely quoted outside of Great Britain, is Unna—perhaps the author thinks "his friend" has been quoted sufficiently to atone for his neglect of scores of others equally great, if not actually greater.

It is curious to notice that no mention is made of blastomycetic dermatitis, porokeratosis, epidermolysis, bullosa, hydrocystoma and various other important skin affections. The book is large enough to have included the rarer as well as the really common dermatological subjects.

Although the chapter upon eczema must be regarded as the best in the book, since eczema represents a large percentage of all diseases of the skin, too little is said about the elements of the affection, while the actual definition, in spite of the author's protest, is at once sarcastic and inadequate. Parasitic diseases receive considerable consideration. Pediculosis vestimentorum is placed among the hemorrhages; while pediculosis capitis is put down among the infectious inflammations; places pityriasis versicolor and erythrasma under the heading of sapropytes; while scabies, favus and ringworm are ranked with pediculosis capitis.

The article on acne, in giving the cause of the affection, lays too much stress upon the microorganism as the cause, while the more rational reasons are feebly given; and to consider ichthyosis as an infectious disease is without warrant. Neither will it do to characterise psoriasis and seborrheal dermatitis as virtually the same disease.

The article on ringworm is nearest complete, and the treatment suggested is fairly good, but the classification tends to mislead, as the author in his servile imitation of Unna denies himself the benefit of suggestions from others quite as capable. The book is sadly unequal—some diseases are fairly and fully treated while others have received only the most meager consideration. For instance, only four pages have been devoted to syphilis; it would have been better had nothing been said upon the subject. Symptomatology has received inadequate consideration throughout the entire book; histology has received more than can be found in any other book of its size; diagnosis is fairly well presented. Treatment is the strongest part of the

book and has been carefully considered. The volume is written in clear, direct style. The author belongs to the new school—perhaps too new to be really valuable to the learner.

The importance of pictures he clearly recognises, in a work on dermatology; most of these in the book represent cases of his own.

A number of the half-tones are good and are well chosen. The flesh tints of the chromo-lithographs are too decided, although they do not fail to aid in illustrating their subjects.

William Wood & Co. have produced this volume in their characteristic style, which leaves nothing to be desired. G. W. W.

MASSAGE AND THE ORIGINAL SWEDISH MOVEMENTS. Their application to various diseases of the body. Lectures before the training schools for nurses connected with the Hospital of the University of Pennsylvania, German Hospital, Woman's Hospital, etc. By KURRE W. OSTROM, from the Royal University of Upsala, Sweden. Fourth edition, revised and enlarged, with 105 illustrations. Philadelphia: P. Blakiston's Son & Co. 1899.

Ostrom is one of the authorities on massage and the Swedish movements. His book has passed through four editions in less than ten years. The work is practical in character, and will be of value to the physician who desires some knowledge of mechanotherapy, and of especial interest to the nurse and professional masseur.

M. J. F.

INTERNATIONAL CLINICS. A Quarterly of Clinical Lectures on Medicine, Neurology, Surgery, Gynecology and Obstetrics, Ophthalmology, Laryngology, Pharyngology, Rhinology, Otology and Dermatology, and Specially Prepared Articles on Treatment and Drugs. By professors and lecturers in the leading medical colleges of the United States, Germany, Austria, France, Great Britain and Canada. Edited by JUDSON DALAND, M. D. (Univ. of Penna.), Philadelphia, Instructor in Clinical Medicine and Lecturer on Physical Diagnosis in the University of Pennsylvania; Assistant Physician to the Hospital of the University of Pennsylvania, etc.; Fellow of the College of Physicians of Philadelphia. Volume II. Ninth series. 1899. Octavo, pp. x.—310. Philadelphia: J. B. Lippincott Co. 1899.

Among the present contributors to this volume at home are William Cheatham, Charles Green Cumston, Henry L. Elsner, Horace H. Grant, Hobart Amory Hare, W. W. Keen and Henry M. Lyman; and abroad are, L. Brocq, A. Fournier, Fränkel, Ernst Grawitz, Gutzman, Jaccoud, König, Lassar and von Bergman. The topics embraced pertain to drugs and remedial agents, treatment, medicine, neurology, surgery, gynecology and obstetrics, ophthalmology, laryngology and dermatology. There are a few good illustrations, but as we have repeatedly pointed out, too little attention is paid to this important feature. If more care were taken in the preparation of some of the lectures that appear in the International Clinics, as well as a more complete attempt at illustrating many of them, additional interest would be stimulated regarding this most excellent plan for diffusing the latest and best of medical literature.

The fact is, it will not answer to trust so important a matter as

the reporting of a clinical lecture to an inexperienced or indifferent medical student. The greatest care should be taken by the lecturer to present excellent material, and to see that it is properly brought before the reader. This requires careful editing of the report, and excellent proof-reading as well.

These are general ideas we present for the consideration of those most interested, and have no special relation to the book before us. It is a most excellent volume, fully up to its predecessors, and makes a valuable addition to the series.

SURGICAL NURSING. A Compilation of the Lectures upon Abdominal Surgery, Gynecology and General Surgical Conditions and Procedures delivered to the classes in the training school for nurses connected with the Woman's Hospital of Philadelphia. By ANNA M. FULLERTON, M. D., Clinical Professor of Gynecology in the Woman's Medical College; Obstetrician, Gynecologist and Surgeon to the Woman's Hospital. Third edition, revised and enlarged, with sixty-nine illustrations. Philadelphia: P. Blakiston's Son & Co. 1899.

This book is issued under a new name and is improved very much. The former title, *Nursing in abdominal surgery and diseases of women*, restricted its scope; whereas, under the broader name, *Surgical nursing*, the other subjects are included and the field covered by the book is expanded.

Dr. Fullerton always writes interestingly, and she has not omitted to do so in this effort. She is a teacher of experience and knows how to utilise her observations to the best advantage. A considerable portion of this book is devoted to the principles which govern aseptic wound surgery—a subject of great importance to nurses. They should be well trained in the doctrine of cleanliness.

A TEXT-BOOK OF PHARMACOLOGY AND THERAPEUTICS, OR THE ACTION OF DRUGS IN HEALTH AND DISEASE. For the use of students and practitioners of medicine. By ARTHUR R. CUSHNY, M. A., M. D., Aberd., Professor of *Materia Medica and Therapeutics* in the University of Michigan Medical Department, Ann Arbor. In one octavo volume of 728 pages, with forty-seven engravings. Philadelphia and New York: Lea Brothers & Co. 1899.

The literature of therapeutics is further enriched by this work of Cushny, which embraces, as its title indicates, pharmacology. What the student most desires is a knowledge of the scientific and efficacious use of drugs—that employment of them that will result most frequently in cure. There has been a wide gap between the lecture room and the clinic on this subject and this author endeavors to supply the missing link, so to speak.

He treats the subject from the experimental viewpoint, which, in the present period, is the only rational way to handle it. Drugs and pharmaceutical preparations that do not stand the test of the clinic must step aside, and only those that meet this critical method can remain. Only such are entitled to the confidence of the scientific physician.

Cushny discusses the action of drugs with logical fairness, and gives a student a pretty clear insight of this important branch of his subject in the early pages of the book. He then divides his treatise into six parts. Part I. considers organic substances, which are chiefly by their local action; Part II. deals with organic substances, characterised chiefly by their action after absorption; Part III. treats of combination of the alkalies, alkaline earths, acids and allied bodies; Part IV. handles the heavy metals; Part V. takes up ferments, secretions and toxalbumins, while part VI. presents menstrua—and mechanical remedies.

This classification is excellent and Cushny's method of dealing with each is intelligent. We have no doubt the book will obtain the confidence of teachers and become a standard work in the class room.

PRACTICAL DIAGNOSIS. The Use of Symptoms in the Diagnosis of Disease. By HOBART AMORY ARE, M. D., B. Sc., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Fourth edition, enlarged and thoroughly revised. Octavo, pp. 623, with 205 engravings and fourteen full page colored plates. Philadelphia and New York: Lea Brothers & Co. 1899.

For the second time within a year we are invited to write a notice of separate editions of this treatise, the third having appeared in the autumn of 1898, and this, the fourth, in the summer of 1899. This is only more remarkable than the fact that the first edition of this work was sent out in August, 1896, thus making four in a little less than three years. Nothing could be more gratifying, we imagine, to the distinguished author, than this marked appreciation of the value of his writing, or such a precious testimonial to the merits of the products of his pen.

We have heretofore, as the several editions issued from the press, expressed our views upon the subject matter which they have contained, and we are prepared, upon a reëxamination of both books and reviews, to reaffirm our former opinions so frequently set forth as to the usefulness of this work to student, practitioner and teacher. It is essentially a clinical treatise on diagnosis, which is the only proper standpoint from which to write such an important part of the foundation of proper medical teaching. From the bedside must come the language of disease and thence must emanate all the artful knowledge pertaining to the interpretation of symptoms.

As a matter of course, since the third edition of this book issued from the press last fall, very little that is new has been invented or discovered with reference to the diagnosis of disease, hence this volume cannot possess many advantages over its immediate predecessor. However, taking advantage of the opportunity, the author has made some revisions of the text and added a few illustrations, including a colored plate.

There is small need in saying that up to the present time no treatise on the subject excels Hare's, and none exceed it in popu-

larity. This is due to the method chosen by the author in the presentation of his subject, in its clear and concise verbiage, and in its scientific tone from cover to cover.

MATERIA MEDICA AND THERAPEUTICS. An Introduction to the Rational Treatment of Disease. For the use of students and practitioners of medicine. By J. MITCHELL BRUCE, M. D., F. R. C. P., etc., Physician and Lecturer on Medicine at Charing Cross Hospital, London. New (6th) edition, revised and enlarged. In one 12mo volume of 618 pages. Philadelphia and New York: Lea Brothers & Co. 1899.

The author, in the preface, announces the scope of this work to be chiefly therapeutical, a rational guide to the student and practitioner of medicine in the treatment of disease.

"At the same time the materia medica has not been sacrificed. On the contrary, it will be found to be set forth in detail by the adoption of a natural and concise arrangement, which presents the subject in such a form that it can be quickly appreciated and easily remembered. The author attaches importance to the plan which he has adopted in the description of the special therapeutics, and which consists in systematically tracing the physiological actions and uses of the different drugs in their passage through the body, from their first contact with it locally until they are eliminated in the secretions. In the part of the manual devoted to general therapeutics he has further departed from the ordinary arrangement, by discussing the actions and uses of remedies, not under the headings of artificial groups, but of the physiological systems of the body, digestion, respiration, and the like, so as to conduct the student from facts with which he is familiar to the great principles of treatment."

The book is of convenient size, and this combined with the excellent manner in which the subject is presented, and its moderate price, will commend it to those who wish something on materia medica and therapeutics less formal than a treatise and more complete than a quiz compend. M. J. F.

ELECTRO-HEMOSTASIS IN OPERATIVE SURGERY. Being a Work Supplementary to the Author's Treatise on the Diseases of Women. By ALEXANDER J. C. SKENE, M. D., LL. D., Professor of Gynecology in the Long Island College Hospital, Brooklyn; Gynecologist to the Long Island College Hospital, etc., etc. Octavo, pp. x.—173. Illustrated. New York: D. Appleton & Co. 1899.

The author of this book is a well-known contributor to the literature of gynecological medicine as well as a surgeon of ability who has met with almost every complication that can arise in surgical practice. The present work is issued as a supplement to the third edition of the author's treatise on diseases of women, wherein this subject was only briefly referred to. This monograph amplifies and develops the subject into a broader discussion than would be appropriate in a general treatise.

The most important question, next to the operation itself, is hemostasis. How many patients have been lost because of imperfect intraabdominal or intrapelvic control of bleeding points it would be impossible to say. Formerly, it was the habit of many, if not all, surgeons to depend upon the *en masse* ligatures, and other incompletenesses in technic, that were responsible for secondary hemorrhages. Nowadays, however, it is the custom to ligate each vessel separately, and even all points that bleed anyway freely are secured with fine ligatures of some sort. The question of disposal of the ligatures, especially those placed to secure large vessels, has been an interesting one that has not yet been fully or satisfactorily settled. These and many more parts of moment arise in considering the methods of hemostasis.

In the ingenious application of electricity to the end in view—namely, an effectual, aseptic, safe way of securing vessels during operations within the cavities of the body. Dr. Skene has added another chaplet to his laurels, and increased the surgical armament most beneficially. Briefly, he treats the vessels with a clamp or forceps, charged with electrical currents in such a manner as to dessicate the tissue, but not to disintegrate it. It becomes therefore impossible for it to bleed, nor does it decay and set up a focus of infection. The author at the time this book was written, had employed the method more than 200 times in abdominal operations, as well as in many vaginal hysterectomies and other operations through the vagina, without having seen secondary hemorrhage after any of them.

A number of cunningly devised instruments are described, which facilitate the application of this method, and make it available in almost every nook and cranny within the abdomen, or elsewhere; indeed, wherever a bleeding vessel may lurk. These are illustrated by numerous engravings, half-tone and wood, which are all described in clear and intelligible language.

The author writes of a subject with which he is familiar, and supports his statements with clinical facts. The book is a most interesting one from beginning to end and should be in possession of every surgeon.

TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF NEW YORK, FOR THE YEAR 1899. Edited by FREDERIC C. CURTIS, M. D., Secretary. Philadelphia: Wm. J. Dornan, Printer. 1899.

This volume contains forty-nine scientific papers, besides the address of the president, the subject of which is The relation of medicine to circulation, and two special addresses—one by William Osler, entitled The problem of typhoid fever in the United States, and the other by Abraham Jacobi, on The disinfection of the alimentary canal. In addition it contains the usual reports of committees, officers, lists of members of county societies, besides many other matters of importance, not only to members of the profession residing in the Empire State, but to medical men throughout the country.

The president's address, by Dr. John O. Roe, of Rochester, is a scholarly paper, exhibiting a rare knowledge of the history of medicine and a deep interest in its progressiveness as a science. It should be read by all physicians and other scientific men. The addresses by Drs. Jacobi and Osler are full of practical information upon important subjects, and we need scarcely add, are handled both scientifically and interestingly.

The other papers are, for the most part, of a high order, carrying the subjects with which they deal well to the fore. The volume as a whole is one of exceptional interest, exhibiting the work of a well-disciplined medical organisation that was presided over with skill and discrimination, and that has been presented by an experienced editor.

THE NEWER REMEDIES. A Reference Manual for Physicians, Pharmacists and Students. By VIRGIL COBLENTZ, A. M., Phar. M., Professor of Chemistry and Physics in the New York College of Pharmacy. Third edition, revised and enlarged; 150 pages. Philadelphia: P Blakiston's Son & Co., 1012 Walnut Street. 1899.

The physician who would keep up with modern materia medica in these days when chemistry is making almost daily additions to our armamentarium finds this manual indispensable. The subjects are arranged in alphabetical order, and a concise description of the remedy, its source, appearance, properties, and therapeutic use, is given.

M. J. F.

INDEX-CATALOGUE OF THE LIBRARY OF THE SURGEON-GENERAL'S OFFICE, UNITED STATES ARMY. Authors and subjects. Second series, Vol. IV. D—Emulsions. Prepared under the direction of the Surgeon-General by JAMES C. MERRILL, Major and Surgeon U. S. Army, Librarian Surgeon-General's Office. Washington: Government Printing Office. 1899.

This great catalogue, now so formidable as to almost appall the ordinary searcher for medical literature, grows apace with the advancing years. The addition for the present year contains 9,628 author's titles, representing 4,133 volumes and 8,523 pamphlets. It also contains 8,828 subject-titles of separate books and pamphlets, as well as 28,316 titles of articles in periodicals.

The library now contains 130,708 bound volumes and 220,839 pamphlets. The total number of titles contained in the catalogue, as far as published is:

Author-titles—Titles, 219,182; volumes, 107,179; pamphlets, 191,846.

Subject-titles—book-titles, 201,679; journal articles, 625,851; portraits, 5,012.

The gratitude of the medical profession is due to the Surgeon-General of the Army and his collaborators for the splendid manner in which all this vast material is rendered available.

ATLAS ON FRACTURES AND DISLOCATIONS. By Prof. Dr. H. HELFERICH, of Greifswald. Translated from the third German edition by J. HUTCHINSON, JR., F. R. C. S. Sixty-eight chromo-lithographic plates with descriptions and 130 pages of treatise, illustrated by 126 woodcuts. Wood's Series of Medical Hand Atlases. New York: Wm. Wood & Co. 1899.

This book deals with a most vexed question in surgery. Fractures and dislocations have always, and no doubt will for all time to come, present difficulties that only great experience, thorough training and mature judgment may hope to surmount. We speak, of course, of the complications that are liable to arise in delayed, or unrecognised cases, rather than the recent simple ones.

This volume is constructed upon lines that are calculated to aid in the solution of many difficult problems these injuries are liable to present. The colored plates are most telling pictures of actual lesions in the continuity of bone or the integrity of joint.

The author is a surgeon of experience and has illustrated or explained his drawings with clinical notes, printed in clear text. This edition has brought the subject forward to the present period and deserves extended and liberal sale.

TRANSACTIONS OF THE TWENTIETH ANNUAL MEETING OF THE AMERICAN LARYNGOLOGICAL ASSOCIATION. Held in the City of Brooklyn, May 16, 17 and 18, 1898. Henry L. Swain, M. D., Secretary. New York: D. Appleton & Co. 1899.

This excellent special society presents yearly a volume that records scientific work of a most valuable and instructive character. Moreover, it is done in a business-like manner, without flourish of trumpets or other noisy exploitations to attract the passing throng.

The papers printed in the volume constitute a distinct addition to the literature of laryngology, and it should be found on the bookshelves of every physician who devotes himself to the practice of this specialty, or who treats the nose, throat or ear even in a tentative manner.

The membership of the association is made up of some of the most distinguished men in this country, who are identified with the practice of laryngology, hence what they write or say carries great weight. Numerous illustrations are printed in the text, which serve to elucidate it.

BOOKS RECEIVED.

The Nervous System and Its Constituent Neurones. Designed for the use of practitioners of medicine and of students of medicine and psychology. By Lewellys F. Barker, M. B., Tor., Associate Professor of Anatomy in the Johns Hopkins University, and Assistant Resident Pathologist to the Johns Hopkins Hospital. With two colored plates and 676 illustrations in the text. Sold by subscription. Cloth, \$6.00. New York: D. Appleton & Co. 1899.

Tuttle's Diseases of Children. A manual for students and practitioners. By George M. Tuttle, M. D., Attending Physician to St. Luke's Hospital, Martha

Parsons' Hospital for Children, Bethesda Foundling Asylum, etc., St. Louis, Mo. In one very handsome 12mo volume of 374 pages, with five colored plates. Cloth, \$1.50 net. Philadelphia and New York: Lea Brothers & Co.

The International Text-Book of Surgery. By American and British authors. Edited by J. Collins Warren, M. D., LL. D., Professor of Surgery in Harvard Medical School; Surgeon to the Massachusetts General Hospital; and A. Pearce Gould, M. S., F. R. C. S., Surgeon to Middlesex Hospital and Teacher of Operative Surgery at Middlesex Hospital Medical School; Member of the Court of Examiners of the Royal College of Surgeons, England. Volume I. General and Operative Surgery. With 458 illustrations in the text and nine full-page plates in colors. Price, \$5.00 net a volume. Philadelphia: W. B. Saunders. 1899.

Transactions of the Texas State Medical Association. Thirty-first annual session, held at San Antonio, April 25, 26, 27 and 28, 1899. Austin: Von Boeckmann, Schutze & Co. 1899.

A Compend of Gynecology. By William H. Wells, M. D., Adjunct Professor of Obstetrics and Diseases of Infancy in the Philadelphia Polyclinic; Instructor of Clinical Obstetrics in the Jefferson Medical College, etc. With illustrations. Philadelphia: P. Blakiston's Son & Co. 1899.

Love and Its Affinities. By George F. Butler, M. D., Professor of Materia Medica and Clinical Medicine in the College of Physicians and Surgeons, Medical Department of the University of Illinois; Author of "Materia, Therapeutics and Pharmacology," etc. Octavo, cloth, gilt top, 134 pages, with photogravure frontispiece, "Cupids Sharpening Their Arrows," by Raphael Mengs. Chicago: G. P. Engelhard & Co., Publishers. 1899.

International Clinics. A Quarterly of Clinical Lectures on Medicine, Neurology, Surgery, Gynecology and Obstetrics, Ophthalmology, Laryngology, Pharyngology, Rhinology, Otology and Dermatology, and Specially Prepared Articles on Treatment and Drugs. By professors and lecturers in the leading medical colleges of the United States, Germany, Austria, France, Great Britain and Canada. Edited by Judson Daland, M. D. (Univ. of Penna.), Philadelphia, Instructor in Clinical Medicine and Lecturer on Physical Diagnosis in the University of Pennsylvania; Assistant Physician to the Hospital of the University of Pennsylvania, etc.; Fellow of the College of Physicians of Philadelphia. Volume III. Ninth series. 1899. Octavo, pp. x.—298. Philadelphia: J. B. Lippincott Co. 1899.

System of Diseases of the Eye. By American, British, Dutch, French, German and Spanish authors. Edited by William F. Norris, A. M., M. D., and Charles A. Oliver, A. M., M. D., of Philadelphia. Volume IV. Motor apparatus, cornea, lens, refraction, medical ophthalmology. Imperial octavo, pp. xii.—962. With fifty-one full-page plates and 211 text illustrations. Philadelphia: J. B. Lippincott Co. 1900.

The Johns Hopkins Hospital Reports. Volume VIII., Nos. 1-2. Contents: On the Rôle of Insects, Arachnids and Myriapods, as Carriers in the Spread of Bacterial and Parasitic Diseases of Men and Animals. A Critical and Historical Study. By George H. F. Nuttall, M. D., Ph. D. Baltimore: The Johns Hopkins Press. 1899.

Malsbary's Practice of Medicine. A Pocket Text-Book of Theory and Practice of Medicine. By George E. Malsbary, M. D., Assistant to the Chair of Theory and Practice of Medicine, Medical College of Ohio, Cincinnati. Just ready. In one handsome 12mo volume of 425 pages, with forty-five illustrations. Cloth, \$1.75 net.

A Text-Book of Physiology. For students and practitioners. By Winfield S. Hall, A. M., M. D., Ph. D., Professor of Physiology in the Northwestern University Medical School, Chicago. In one very handsome octavo volume of 672 pages, with 343 engravings and six colored plates. Cloth, \$4.00 net; leather, \$5.00 net. Philadelphia and New York: Lea Brothers & Co., Publishers.

A Laboratory Manual of Physiological Chemistry. By Elbert W. Rockwood, B. S., M. D., Professor of Chemistry and Toxicology in the University of Iowa. Illustrated with one colored plate and three plates of microscopic preparations. $5\frac{3}{4} \times 7\frac{3}{4}$ inches. Pages viii.—204. Extra cloth, \$1.00 net. Philadelphia: The F. A. Davis Co., Publishers, 1914-16 Cherry Street.

LITERARY NOTES.

THE United States Marine Hospital Service has been engaged in the investigation of the cause of yellow fever. The Surgeon-General of that branch of the public service has lately sent out a number of brochures bearing upon the study of this disease. The following are their titles :

Report of the commission of medical officers detailed by authority of the President to investigate the cause of yellow fever.

Yellow fever : its nature, diagnosis, treatment and prophylaxis, and quarantine regulations relating thereto.

Train inspection in yellow fever epidemics.

Shipment of merchandise from a town infected with yellow fever.

Other pamphlets recently sent out by the Surgeon-General, U. S. M. H. S. are :

Mortality statistics in the United States for the year ending December 31, 1897.

Report on Formaldehyde disinfection in a vacuum chamber.

Any or all of these papers may be obtained upon application to Surgeon-General Walter Wyman, U. S. M. H. S., Washington, D. C.

THE *Vermont Medical Monthly*, published at Burlington, issued a souvenir number in September, 1899, complimentary to the Vermont State Medical Society. It contained, among other interesting material, a history of the Medical Department of the University of Vermont, historical sketches of the several hospitals at Burlington, the Vermont laboratory of hygiene, and a historical résumé of the City of Burlington. These articles were copiously illustrated with half-tone engravings, and the monthly was printed on highly finished book paper. It is a most creditable exhibit of enterprise on the part of the editors and publishers of this excellent journal.

MISCELLANY.

THE Antikamnia Chemical Company, of St. Louis, has lately sent out to the profession a morocco pocket folder, which is a most convenient

kind of pocket-book, intended especially for bank notes. The folder contains specimens of two new tablets that have just been formulated and put upon the market by this enterprising house. They are called the "antikamnia laxative tablets," and the "antikamnia and quinine laxative tablets." The formulæ of these tablets are as follows :

Antikamnia Laxative Tablets.

Each tablet contains :

Antikamnia	gr. 4 3-4
Cascarin	gr. 1-8
Aloin	gr. 1-32
Ext. belladonna	gr. 1-32
Podophyllin	gr. 1-32

Antikamnia and Quinine Laxative Tablets.

Each tablet contains :

Antikamnia	gr. 3
Quinine bisulph	gr. 1 3-4
Cascarin	gr. 1-8
Aloin	gr. 1-32
Ext. belladonna	gr. 1-32
Podophyllin	gr. 1-32

The indications for their administration will readily occur to every intelligent physician and their convenience, as well as elegance, commend them as an addition of value to the therapeutic armamentarium of the profession.

ITEMS.

A SCOFFER.

THE CHRISTIAN SCIENTIST HAD GOOD REASONS FOR BELIEVING HER
PATIENT HAD NO FAITH.

(*From The New-Orleans Times-Democrat.*)

"I WITNESSED a decidedly picturesque incident coming in from Chattanooga yesterday," said a guest at one of the hotels last night. "There were four of us at the end of the car—a business man from Houston, two women from Wilmington, Del., and myself, all middle aged, serious people, and naturally we drifted into conversation. Before long one of the women, who was a stout, matronly person, informed us that she was a christian science 'demonstrator,' and, needless to say, that started an interesting discussion. She gave us the usual nebulous 'explanation' of the cult, which no outsider has ever been able to understand, and then proceeded to describe a number of miraculous cures she claimed to have effected.

"The Houston man had said very little, but finally he remarked that he had been suffering for several years from a stiffness of the right ankle. 'You mean you think you have been suffering,' said the christian scientist. 'There is really nothing the matter with your

ankle; in fact, it does not exist, except in your mind.' 'Well, it seems very real,' said the Houston man, 'and gives me a great deal of trouble. Do you think you could do it any good?' The Wilmington woman smiled in a pitying sort of way and replied that she could undoubtedly effect a cure. 'It may take some time to cleanse your mind of the delusion,' she said, 'and we can't begin too soon. Suppose I give you a treatment right now?' 'By all means, madame,' said the Texan, and the portly scientist closed her eyes and apparently took a short nap. The rest of us waited in solemn silence. In about ten minutes she shook herself and smiled blandly. 'Well, sir,' she said, 'you feel a good deal better now. The stiffness in your ankle is going away; going away; going away rapidly.' 'I am sorry to contradict you,' interrupted the Houston man, 'but it's just as bad as ever. If you'll listen you can hear it squeak.' He moved his foot on the floor, and, sure enough, it gave out a horrible creaking sound.

"The christian scientist turned pale. 'Good heavens!' she gasped, 'what is the matter with it anyhow?' 'Needs oiling, I think,' said the Texan. 'I forgot to mention that this foot is artificial.' The fat lady bounced to her feet and her double chins quivered with indignation. 'I am forced to believe,' she exclaimed dramatically, 'that you are no gentleman, sir! and a scoffer, sir! And I will bid you good day!' she said as she swept into the aisle. The two women retired to the next car, and the Texan and I laughed for an hour by the watch."

FAITH HEALERS INDICTED.—The grand jury of Porter County, Indiana lately returned indictments against Mrs. G. J. Smith, Mrs. M. L. Anderson and Mrs. Edward Smackles, converts of Dr. Dowie, the Chicago faith cure healer, charging them with being responsible for the death of the son of Henry Erne, who died without medical attendance, the only means adopted for his relief being the reciting of prayers. The grand jury of Lake County also began an investigation for two deaths attributed to criminal neglect by the practice of faith curing.

IT is stated that the village of Findlay Lake, Chautauqua County, N. Y., needs a competent physician. A young man of professional ability would undoubtedly find this a valuable field.

It is quite probable also, that Chautauqua, N. Y., would prove an attractive place for an enterprising physician. In the summer it is visited by many thousand people from every part of the country, and the environment is an agreeable one.

BUFFALO MEDICAL JOURNAL.

VOL. XXXIX.—LV.

DECEMBER, 1899.

No. 5.

Original Communications.

PUS IN THE PELVIS.¹

By HERMAN E. HAYD, M. D., M. R. C. S., Eng., Buffalo, N. Y.

THE pathology of Goupil and Bernutz has revolutionised the treatment of the pelvic organs, and it has taught us clinically the relationship which exists between infections of the endometrium and pus in the pelvis. Usually these inflammatory processes travel by continuity of tissue, from the endometrium to the tubes and ovaries and peritoneum, but occasionally the channel of infection is by the lymphatics of the cervix and uterus, along the broad ligament to the peritoneum, and producing the so-called true pelvic abscess, leaving the tubes and ovaries free and healthy. Consequently, we may have pus in the pelvis, as the result of an infection, perhaps gonorrheal or post abortum or post puerperal, or as a result of traumas and injuries of the cervix and body of the uterus, resulting from accidents due to careless surgical interferences or intrauterine manipulations, which may extend either along the mucous membrane to the peritoneal cavity, or by way of the lymphatics; the one producing primarily a tubal or ovarian abscess, and the other an abscess in the cellular tissue of the broad ligament.

Pus in the pelvis should be dealt with upon general surgical principles, and, like pus in any other part of the body, should be evacuated as soon as it can be with certainty diagnosticated. The history of the case, the existence of a gonorrheal infection, or a mixed infection consequent upon criminal or traumatic abortion, the presence of fever and acute pain and tenderness upon vaginal and upon

1. Read at the Buffalo Academy of Medicine, October 24, 1899.

bimanual examination, the presence of a tender mass in the pelvis, which has perhaps existed for weeks, increased leucocytosis, after having excluded pus in other quarters of the body, is strongly presumptive of a pelvic suppuration. Fever, however, does not always exist, and, in fact, is often absent, even with large collections of pus, but when present suggests an acute element in the way of an exacerbation of old inflammatory exudates, or a recent mixed infection with the streptococcus organism in evidence. Of course, the more acute and general the constitutional disturbance, the more imperative is early and active interference necessary, yet one must not lose sight of the fact that all acute inflammations of the uterus, tubes and ovaries have fever and active general disturbances, and may not at any time develop pus, but go on to perfect resolution. Nevertheless, the contrary is also true, for early in the illness pus is often formed, and, therefore, ignorance in the phenomena of these inflammations should not unnecessarily put off operative interference and leave these cases so that delay becomes responsible for a greatly increased mortality, by rendering what would be simple operative procedures absolutely desperate life-saving undertakings, with resulting post operative sequellæ and complications, often as difficult to manage as the original gross lesion.

Post puerperal infections and particularly those coming on after the second week, as a result of septic endometritis and often having latent gonorrhea present, are the cases which terminate most frequently in pyosalpinx and ovarian abscess. Dermoid cysts are often brought into pernicious activity by the puerperium and unrecognised intraligamentary and ovarian cysts frequently undergo suppuration as a result of these septic foci. Therefore, with these facts in view, an early suspicion of pus will suggest itself and the surgeon will be called to confirm these impressions wherein an early and practically safe operation will result with a speedy convalescence and a future healthy and useful life.

During the last few years, and particularly since the visit to this country of some celebrated French surgeons, the profession has been divided as to which is the best route to attack pus in the pelvis, whether by an abdominal section or through the vagina. Many of our representative operators have acted upon the suggestions of these continental teachers, and are removing by vaginal incision and drainage collections of pus, and frequently supplement this work by a vaginal hysterectomy, ablating at the same time enlarged tubes and ovaries, whether filled with pus or not. There is much to com-

mend to us, in certain selected cases, this method of incision, but, unfortunately, a few wild enthusiasts, who seek fame by notoriety and medical journal and state society publicity, have uttered the dictum that all pus collections, whether free in the pelvis or circumscribed in the tubes or ovaries, must be attacked per vaginam. The absurdity of this sweeping position is evident to any one who has operated much from above, because he realises that it is absolutely impossible to meet with safety the mass of complications, of adhesions of bowel and omentum to pelvic viscera, as one so frequently sees in some of the desperate cases that are operated upon every day by many of us. I am free to admit that the brilliant results of our foreign surgeons have encouraged us to less radical measures sometimes, and many of us, who heretofore always operated per abdominem, now in selected cases attack per vaginam. Therefore, this question of route has much for our serious study and consideration, whether viewed from the standpoint of the vaginal hysterectomist or the abdominal sectionist, and no man can consider that he is following the course of scientific surgery, when he allies himself with any one method of operative attack to the exclusion of the other; but as his skill and diagnostic ability increases, so will he the more readily choose the proper route to best meet the diseased conditions.

Nature, by her beautiful protective processes, shields herself from the approach of pus by making dense barriers of adhesions, and, as a rule, confines the suppuration to certain definite areas. If it were possible to establish free drainage from below for all the different points of suppuration, it would be natural to expect that in a short time the acute trouble would subside and reparative processes begin; but, unfortunately, many of these pus cavities are lined by a secreting membrane and will continue to give off pus so long as these membranes exist *in situ*. Therefore, in many of these cases, the cure cannot be effected unless the diseased organ is eradicated, and if it is intensely bound down, irreparable injury must follow when operating through the narrow vagina and without the sense of sight to aid in peeling off the agglutinated organs. Again, operating through the vagina presupposes a diagnostic accuracy which men do not and never will possess, and when the advocates of this method divide their cases into certain classes, the one operable by one method, and the other by the other method, they make fast rules which practical every-day experience does not justify them in assuming.

For example, Pryor says in his recent article: "I would always consider that the vaginal is the operation of election in all cases of

pelvic suppuration where the vermiform appendix did not require removal, and when there was no fistulous opening between a coil of small gut and a pus sac." Notwithstanding all that has been done by palpation in diagnosing inflammatory conditions of the appendix, I maintain that it is not possible to say, in a given case of pelvic suppuration: in this one I shall find an appendix adherent to the pelvic mass and diseased and requiring removal, while, in the other, such a complication need not be expected. I have, times without number, delivered a large pus tube or ovarian abscess, and found that I had torn off the appendix vermiformis, or that I needed to remove it, because it was so disorganised; and this experience was not always confined to masses in the right pelvis, because occasionally I found the appendix so long, that it was densely adherent even to the left tubal and ovarian structures. So with fistulous tracts and although they most frequently exist between the pus tube and the sigmoid flexure and large bowel, yet it is impossible to make such a diagnosis before operation, and if one into the small bowels were undetected, death would surely follow, if not carefully and properly repaired. And although Pryor shows us a wonderful collection of cases—where he operated 100 times through the vagina without mortality—yet he has not convinced me that many of these women will not return for future operation, because his work through the vagina was necessarily incomplete. Price, Edebohls, Mann and a host of us lesser lights, often have a long series of cases without a death, and then, when least expected, meet a fatal issue; and I am satisfied that this element of uncertainty must be greater when we operate without the advantages of sight, which has been so much strengthened by reason of the Trendelenburg position, because it matters not how keen our sense of touch may be, by reason of repeated experiences, the educated eye and the educated fingers must together accomplish more than either could do singly.

Some cases are peculiarly suited for the vaginal operation, and all men pretty well agree that they should only be attacked through the vagina; for instance, a pelvic abscess confined to the broad ligament, or an abscess where the pus is free in the pelvis, such as I had a few days ago in the Deaconess's Hospital, or a large pyosalpinx or ovarian abscess alone, or with multiple abscesses, which has assumed such enormous proportions that it might well be called a pelvic abscess, when it exists, not only above the pelvic brim, but is even pointing low into the vagina, perhaps to the introitus. Such cases should, as I have said, be opened through the vagina and thoroughly

drained, and if in the course of time, a cure is not effected, a section can be done later, when the patient's condition would justify such a procedure; or such abscesses can be thoroughly inspected by making an abdominal incision and then with the one hand in the abdomen as a guide, more effectual vaginal incisions can be made into the various abscess cavities, and all of them be more thoroughly drained. However, such a course is not often undertaken and is usually resorted to only when the abdomen has been opened, and the surgeon has thought it best to retire, because the mass was so large and so densely agglutinated to adjacent structures and the adhesions and vascular connections were so great as to make it impracticable to attempt its removal.

The advocates of vaginal operations maintain that there is less shock after such operations than when the same are performed through the abdomen. This may or may not be the case, but, so far as I am concerned, I am inclined to believe with Baldy and his followers, that shock, as we ordinarily see it, is not much of a factor in producing mortality, and that when we can exclude injuries to important organs by reason of careless manipulations, when bowel and visceral tears have been properly taken care of, when unsuspected torn ureters have been properly anastomosed, mere time consumed by experienced operators in their operations is not responsible for increased mortality. Add to this the application of methods, as Morris says, in themselves dangerous and hazardous, to meet existing complications, such as the unnecessary insertion of drainage-tubes and badly placed yards of iodoform gauze and other equally dangerous chemical products, within the peritoneal cavity, and then the mere element of time occupied in operations is still further robbed of its death possibilities.

Another argument is that hernia so frequently follows abdominal operations, which I think can be fairly met by the statement that it occurs less frequently now by reason of our improved surgical technique, and perhaps not more often than the same takes place after vaginal operations, according to Eastman, of Indianapolis, and other surgeons who have done a great deal of vaginal work.

The presence of an abdominal scar cuts no figure in this argument, unless we can prove that better, safer and more beneficial operations result from attacking diseased conditions through the vagina than above the pelvic brim, because few women care anything about their scars if good health and function have been restored to them by reason of their operation.

It is also said that the period of confinement is much less and the convalescence much more rapid when operations are performed through the vagina. This statement also interests me but little, because I am satisfied that our patients get up altogether too soon after any operation, and assume to work in an absurdly short time. I have had patients who were anxious to go home long before the end of the second week, and it was only by the strongest persuasion on my part that they could be kept in bed the prescribed fourteen days. The personal equation enters so largely into these cases, and what might with reasonable safety be permitted in one at the end of the tenth day, could not with the other, and, in all probability, both patients would best subserve nature if they rested a very much longer period. Yet Emil Ries, of Chicago, has been lately advocating the early assumption of the erect posture and the early administration of solid food after abdominal sections—beefsteak, potatoes, and the like,—in the hope of stimulating better peristalsis, and Edebohls, of New York, is advocating the early assumption of regular business duties in an absurdly short time after his appendicitis operations.

I shall not occupy your time by further dilating upon the respective advantages and disadvantages of the two methods of operating, as this was not the theme of my paper. It was pus in the pelvis, which should be let out as soon as possible; and if, by reason of your special skill and experience, you are enabled to best meet this condition through the vagina, with less danger to your patient and more satisfaction to yourself, adopt that method. But first carefully consider that vaginal operations in the pelvic cavity are more difficult to perform than through an abdominal opening, that vaginal surgery is necessarily less complete and the dangers and risks of accident to important structures infinitely greater, and the possibilities and necessities for conservative surgery of the tubes and ovaries is entirely out of the question. Whether you leave the uterus in cases of double pyosalpinx or ovarian abscess, is a subject which is not yet definitely settled, but of one thing I am sure, that the consensus of the best surgical thought of today is to leave the uterus when possible to support the lower abdominal segment, and to remove only such portion or portions of the ovaries and tubes as are irreparably diseased, so as to continue as long as possible the function of menstruation, which is necessary for the physical and mental well being of woman.

THE ADMINISTRATION OF ANESTHETICS.¹

By FRANK W. McGUIRE, M. D., Buffalo, N. Y.,

First assistant to City Hospital for Women.

I THINK all will agree that this important subject does not receive the attention it should from the medical profession, when we consider the number of anesthetics that are given and the limited few who can skilfully execute this task. Will anyone deny that he who undertakes such a task should be thoroughly informed on this subject? How often we see an anesthetic given where the patient at the beginning is struggling from the too rapid administration, or where it has taken an excessively long time to obtain complete anesthesia, and often, when it is reached, the patient is not kept there. Not infrequently, too, we find the anesthetiser much perplexed, not knowing whether to allow more air or more anesthetic, his rule being to give more anesthetic if the patient moves, if quiet to let them alone.

The administration of an anesthetic is a task that we all have to perform on occasions and it seems to me that we are playing with death at long odds, if we do not know whether a patient should receive more anesthetic or more air. We all know, as students, that every operable condition, many of which the physician is never called upon to perform, is used to the best advantage to impart knowledge, except in the case of the administration of an anesthetic, but we hope that the teachers in our medical colleges will some time in the near future devote more time to the practical teaching of this important subject, availing themselves of every opportunity to impart knowledge upon it. It appears to me that the hospital clinics are the proper places for acquiring knowledge on this subject and, if properly conducted, would turn out better anesthetisers. A student will learn more in administering one anesthetic under the direction of a competent instructor than by the administration of several, if left to his own resources. At present a student acquires his knowledge and skill by the hardest kind of experience and at an entirely unknown expense to his patient.

Some look upon anesthetising as a menial position, but a skilful administrator of anesthetics is a respected personage among his fellow practitioners, holding a responsible position, being second only to the operator. These conditions will justify a paper on this subject with special reference to the needs of the student, who wishes to

1. Read at the meeting of the Obstetrical and Gynecological Section, Buffalo Academy of Medicine, September 26, 1899.

be able to give an anesthetic in a skilful manner, with safety to his patients and satisfaction to the surgeon.

PREPARATION OF PATIENT.

A few days' preparation is a great advantage. The heart and lungs should be examined for any pathological condition. The urine should be examined for evidence of nephritis. The amounts of solids and urea should be ascertained. The intestinal canal should be cleared out by a brisk cathartic. Two hours before the operation the lower bowel should receive a flushing. Some advise the retention of a pint of water in the rectum, in order to lessen the thirst that follows operation, while others advise the drinking of half a pint to a pint of water two hours previous to operation. Either of these seems to me to be of questionable utility, and should not be used in operations on uterus or bladder, as both predispose to a full bladder. The latter should not be used in any operation, as anything taken into the stomach so recently before anesthesia predisposes to vomiting. A much better means of accomplishing this end is to give an enema of four ounces of a saline solution every two hours as soon as consciousness is restored.

During this period the patient should receive a light nourishing diet. If the operation is performed during the forenoon, the patient should receive no breakfast, especially if the operation is in the peritoneal cavity; and if during the afternoon, no dinner should be eaten. At least five hours should elapse between an operation and the taking of any food into the stomach, especially by nervous patients. Strychnine, gr. 1-30, hypodermatically, every four hours is a good safeguard. It is important that the anesthetiser should obtain, if possible, the confidence of the patient. If he does not know the patient, he should be introduced by the family physician, who should assure the patient that he will be in skilful hands. The anesthetiser should then talk to the patient for a few moments, ascertaining that the mouth is free from foreign bodies. By this you impress the patient of your carefulness. Some vaseline should be rubbed on the lips, cheeks and nose, to prevent irritation from the anesthetic. The patient should be told to keep the eyes closed. Examine the arms for ankylosis, as an unnoticed fixed elbow may cause one to believe that the patient is not relaxed, and consequently the anesthetic may be pushed too far. See that the clothing is easily removable and no unnecessary clothing is worn. If tight about the chest, abdomen or throat, it will interfere with the respira-

tion and circulation. The patient should lie in a horizontal position, the head only elevated to a comfortable breathing posture; arms should be folded, so that the end of the sleeve can be pinned to the shoulder, unless in the way of the surgeon. Hands above head, on account of raising the clavicles, predisposes to an excessively full right heart from the return circulation. An anesthetic should not be given on a lounge, as we are sometimes asked to do in private houses, as the head is elevated too much, or if for a dentist see that the chair is in a horizontal position and when the patient has sufficient anesthetic the head of the chair may be slightly raised.

DROPPERS, INHALERS AND SO FORTH.

For chloroform I find that none compares with a two ounce bottle, with glass stopper, a notch being in the stopper and neck of bottle, so that, when placed opposite each other, a drop at a time will escape. Patent droppers are hard to regulate and often allow too much anesthetic to escape at one time. The inhaler should be a common wire mask, covered with one thickness of old linen, made from old tablecloths or napkins, or two thicknesses of cotton gauze. Linen being more absorbent than cotton allows the mask to become wet; on this account the cotton is to be preferred. A fresh one should be used each time, or the old one sterilised, as disease has been contracted from contaminated inhalers. For ether, a towel about a folded paper, with absorbent cotton in the cone, will answer as well as any of the elaborate patent inhalers. Its cleanliness and simplicity is much in its favor, but in the hands of a careless anaesthetiser a patient may be readily asphyxiated, which detracts from its usefulness. Besides the apparatus already mentioned, there should be ready for use in every well-equipped operating-room the following—namely, a strong tenaculum, sponges upon holders, a mouth gag, a hypodermic syringe with strychnia, a cylinder of oxygen, with apparatus for its administration, an electric battery and a Fell's artificial respiration apparatus. Atropine should also be at hand to be used as a stimulant to the heart and respiration, to overcome the great fall of arterial pressure which occurs in serious collapse and heart syncope.

QUALIFICATIONS OF ANAESTHETISER AND PREPARATION.

I believe if one of us required an anesthetic we would use as much care in selecting the anaesthetiser as we would the surgeon, unless an operation was to be performed that required exceptiona

skill and experience. Then why should we not use the same care in selecting the anaesthetiser for our patients, and not trust the task to a student, nurse or some physician who is unfamiliar with its administration? The anaesthetiser should be cool, thoughtful and above all should have experience: one who appreciates the great responsibility that rests with him, giving his undivided attention to the anaesthesia and not devoting, as we frequently see, almost his whole attention to the operation. He should be clean. Having cleansed his hands, he should don a sterilised suit and cap. After operation he should see that the patient is properly placed in bed and watch his condition until he regains consciousness. The patient should not be allowed a pillow for some hours after operation. If a laparotomy, not until the bowels have moved and all vomiting has ceased.

CHOICE OF ANESTHETICS.

We should know that we have a pure drug, as many of the distressing symptoms are produced by impurities, especially the compounds of methyl and their decomposition products. (These are free chlorine compounds of hydrocarbons with chlorine, formic and acetic acid, and the like.) I believe the simplest and most practical is "Hepp's smelling test," which is made by dipping chemically pure filter paper into the chloroform and allowing it to evaporate. If the chloroform is pure, there will be no odor, but if it is impure, there will remain more or less of a sharp, irritating and unpleasant odor. Chloroform when pure is a clear, colorless, volatile liquid, having a pleasant, aromatic odor and a sweetish taste. It should be kept in well-stoppered, dark colored bottles and bought in quantities that will ensure its not becoming old. It has been recommended that the addition of half to 1 per cent. of absolute alcohol will prevent decomposition and will not enhance its value as an anesthetic. I do not intend to enter into the discussion of chloroform vs. ether, as I believe we all agree that chloroform is the best general anesthetic we have at the present time. There are undoubtedly more reported deaths from chloroform upon the table, but a number of deaths occur from pneumonia, bronchitis, suppression of urine and nephritis, as the result of the administration of ether, but are never charged against it. Chloroform is given in preference to ether in the following conditions—namely, in all pulmonary diseases, in renal disease, in disease of the bloodvessels, in abdominal distention, in cardiac lesions, unless compensation is disturbed, in cases of severe pain, in operations by gaslight, in obstetrical cases, in cranial operations, in

laryngeal operations, in abdominal operations, in operations on the eye, face and oral cavity, in children and old people, in emergency cases where speed is required, in persons known to bear ether badly, and where the anaesthetiser is skilled. Ether may be given in preference to chloroform in the following conditions—namely, in cases where the patient is known to bear chloroform badly, where the anaesthetiser is unskilled, in extreme prostration, in collapse, following loss of blood, in chronic alcoholism, and when patient has taken chloroform for some time, face blanching frequently, pulse (130 to 150) showing that chloroform is affecting the heart and vessels. Often the substitution of ether will do away with these untoward symptoms from the stimulation it produces. Never give any anaesthetic in operations for the repair of the soft parts following labor, as it is almost certain to produce alarming hemorrhage.

THE ADMINISTRATION OF THE ANESTHETIC.

The anesthetic should be given slowly, but persistently, holding the cone from four to six inches from face, allowing the patient to breathe a few inhalations without any anesthetic on the cone. Then drop on one or two drops, requesting the patient to breathe naturally and regularly. Patient will frequently breathe regularly, if told to count. Gradually allow the cone to come nearer the face until it rests on it, slowly increasing the quantity on the cone according to the amount the patient requires. I do not believe that any set rule can be used for increasing the anesthetic, as some can take much larger quantities than others without experiencing any unpleasantness. Experience teaches the proper amount. If a patient should cough or struggle, remove the mask and allow a few respirations without any anesthetic. In this way patients are frequently anaesthetised without any unpleasant sensations. To recapitulate, I wish to impress the fact that the process should commence at zero, and the strength of the vapor be gradually increased to the amount necessary to produce the required effect. This is the safest and most scientific mode. When the desired effect is produced, the patient should be kept there—if you will allow the term—"his head just above water." If you allow him to come from under the influence of the anesthetic and then push him under again, now up, now down, then he is in imminent danger. When once under, except in rare cases, if he recovers so that in your hurry to get him relaxed you pour on a larger quantity, or soak the mask, the fault is yours and the subsequent danger

that may arise should be charged to your negligence and not to chloroform.

STAGE OF ANESTHESIA.

(a) First stage of stimulation is of very brief duration and consists of a heightening of all the senses, a mild form of intoxication, which rapidly and unconsciously passes into the second stage. (b) Second stage—stage of excitement, stage of struggling. In this stage there is the conscious or perhaps unconscious effort of the individual in a stupefied state to fight against some of the symptoms produced by the anesthetic. We frequently have produced spasm of the glottis from the irritating effect of too highly concentrated vapor, but where the drug is given very cautiously in weak, delicate persons, or in those whose whole attention is directed to other interests, as during parturition, the second stage may pass into the third without any resistance. In strong, robust people and alcoholics the excitement is generally marked. During this excitement great care is necessary, especially with children. If the vapor is too concentrated, enough anesthetic may be inhaled with one inspiration to paralyse the heart. The third stage—(c) stage of surgical anesthesia. In this stage all the reflexes, except those of the involuntary muscles become abolished, the muscles are relaxed, the respiration slower and fuller and the pulse diminished in force and frequency. By watching the reflexes carefully and adding enough anesthetic to barely keep them abolished, a patient may be kept in this stage for hours. If the anesthesia is carried still further, we get the fourth stage—(d) the stage of paralysis. The face is suddenly blanched, or may be cyanotic, veins distended, respirations slow, shallow, sighing and, finally, ceasing. Pulse rapid, feeble, sometimes fluttering and may stop without warning. Pupils are widely dilated, eyes set and rigid, and death rapidly ensues unless prompt means of resuscitation are used.

PHYSIOLOGY OF CHLOROFORM.

Its exact physiology is still a matter of dispute, which, to say the least, is remarkable after fifty years of the use of the drug, which has been the greatest boon to humanity since the introduction of opium. Most observers agree, however, that it always causes a marked fall in blood pressure, with slowing of the heart-beat and respiration, the latter finally ceasing after a sufficiently large dose has been administered. This fall in blood pressure, has been variously explained as being due either to vaso-motor depressions produced centrally, or by weakening the heart's action. Both factors probably play a part in produc-

ing it, but the latter is most to be feared, the drug acting as a direct poison to the heart muscle.

Experiments on lower animals show that when chloroform is pushed until it produces death the respiration ceases first, which is the cause of death. On the other hand, in the majority of reported fatal cases in the human being, the heart has stopped first and in some instances respiratory efforts have been noted some minutes after the heart ceased beating. Under such circumstances, I think the best view to take of the matter is that chloroform, when given in poisonous doses, usually kills by paralyzing the respiratory center, but that it has a direct toxic effect on the heart muscle and under certain conditions, not at present understood, can cause death before large enough doses have been absorbed to destroy life in the usual way. Upon post mortem, in this latter condition, the heart is found dilated and its cavities filled with fluid blood. Failure of the heart, in this way, may be gradual, but often it stops suddenly without warning, and resists all attempts at resuscitation. Death has also been reported as occurring from fright when only a few minims of the drug were inhaled.

REFLEXES.

Our object should be to give the least possible anesthetic, but sufficient to keep the patient in the third stage, and I believe this can be accomplished more skilfully by watching the ocular reflexes than by any other. The pupils at the beginning are usually dilated, unless morphine has been administered previously. They will usually contract under chloroform and should remain so while safe and efficient quantities are administered. Whereas, if patient is allowed to recover somewhat, they will dilate. The pupils will also widely dilate when chloroform is pushed to the stage of paralysis. It is just at this time that it is very important to know whether you should give your patient more chloroform, or allow him more air. I am always directed in this by feeling the rigidity or tension of the eye—either external to eyelids, or on cornea if necessary. If the pupils are widely dilated and the eye rigid, it is time to give your patient a liberal allowance of air. If the pupils are contracted and the eyes soft and flabby, give more chloroform. Another important reflex is the oscillating edge of the iris. While this remains the anesthetic can be safely pushed, but when it disappears the point of danger is usually approaching.

There is a certain number of patients whose pupils remain dilated during the entire anesthesia, especially if it is pushed too rapidly at

the beginning. Another class embraces those in which the ocular reflexes do not respond. In these you have to be guided by the remaining reflexes, the condition of the heart and the condition of the respiration. If any do not bear the chloroform well, ether should always be substituted. In using the ocular reflex always examine for a glass eye, as serious mistakes have already been made by not noticing this condition. There are objections to using the ocular reflexes, as conjunctivitis and ulcerations of the cornea have been caused by either an unclean finger, with a long nail, or by a drop of chloroform. The former can be prevented by cutting the finger nails short and having hands clean; the latter by using a towel over the eyes, and only removing it when you wish to examine the eye. I believe these objections count for *nil*, as compared with the safety of our patients.

Muscular relaxation may be tested from time to time by the raising of the forearm. Snoring and stertorous breathing indicate pharyngeal and faucial paralysis and with this the state of surgical anesthesia. The masseter muscles are generally the last to relax. If, during anesthesia, the patient gains control of the jaw, he is coming out of the influence of the anesthetic. In operations for suppurating appendicitis, pyosalpinx, intestinal obstruction, where more or less peritonitis is present, also in separating old adhesions, the patient may be profoundly anesthetised and the abdominal muscles will be still unrelaxed. This condition can generally be obviated by giving a hypodermic of morphine before the anesthetic is commenced. It must not be forgotten that reflexes are produced in operations on the prepuce, rectum and vulva when patient is under complete anesthesia. Also in hysterical women, the fingers will sometimes move and, if you depend entirely on this reflex and push the anesthetic, you will soon have your patient in a condition in which the respiration is embarrassed or has ceased and the pulse becoming imperceptible. In other words, you will have the stage of paralysis.

THE CIRCULATION.

The color of face, nails and lips should be watched carefully, as blanching of these parts may occur before any trouble is indicated in the blood current. The pulse at the beginning is generally accelerated from fear, but when the third stage is reached it generally falls to normal and remains there. The anesthetiser should know for himself the condition of the pulse and should never trust it to some one else. The pulse may sometimes be intermittent at the begin-

ning, which may be caused by fear or a tobacco heart. A pulse of this kind should be watched carefully and, if any untoward symptoms arise, ether should be used. If it is caused by fear, the heart will become regular when surgical anesthesia is reached. Many variations of the pulse may exist without serious consequences arising, but the most assuring one to the anesthetiser is the regular and steady one. In the latter stages when paralysis is impending from an excess of chloroform, you may find the pulse weak, rapid and irregular. It may also be very soft with no force, or may become suddenly imperceptible.

RESPIRATION.

The character of patient's breathing is probably the most important sign of his condition. The ear rather than the eye should be depended upon for the assurance that he is breathing properly, as the chest may rise and fall regularly and no air enter the lungs. The sound of the air entering the trachea and bronchial tubes is unmistakable and the ear readily detects it. I do not wish to infer that the anesthetiser should concentrate his attention to the breathing or to any one point, but his ear should be so well trained as to detect the slightest change. Snoring and stertorous breathing is produced by paralysis of the pharyngeal and faucial muscles, and is indicative of profound narcosis. With ether this is not necessarily a dangerous condition, but when it occurs during chloroform narcosis it should always receive attention, ascertaining the profoundness of the anesthesia. Turning the head a little to one side, or from one side to the other, will frequently stop it. If not, the lower jaw should be brought forward.

Patients with adenoids and nasal obstructions, or those who are fleshy, may have disagreeable respiration during the entire anesthesia. The respirations at the beginning of the anesthesia are slow, but the patient should be directed to breathe naturally. During the stage of excitement patients will frequently hold their breath for some moments and then take a full deep one. At this period the chloroform should not be pushed, as sufficient of the vapor may be inhaled with one deep breath to paralyse the heart muscle. If it is necessary to add more anesthetic, it should be done slowly and very carefully. When full anesthesia is reached the respirations are about normal, but if the stage of paralysis is reached, it becomes slower, more shallow and finally ceases. During anesthesia, short, jerky and rapidly increasing respirations, repeated efforts at deglutition, with pulse increasing

rapidly, dilated pupils responding to light, are all symptoms which indicate that vomiting is approaching. If this condition is not noticed at once, and more anesthetic not given, you will have to undergo the annoyance of having your patient vomit.

The management of the tongue is very important. The more skilfully this is managed, the more skilful will be the anesthetiser. If the epiglottis closes, it should be brought forward by closing the mouth and bringing the inferior maxilla forward and, if necessary, slightly extending the head. Sometimes merely closing the mouth will remedy this condition. When the mouth is closed it should be known that there is no nasal obstruction. If necessary a catheter may be passed through nares. If this does not remedy the condition, use a strong tenaculum to bring tongue forward, or pass a needle with strong silk from side to side through the tongue and make traction. A tongue forceps, such as we usually see in the clinic should not be used, as it is unnecessary and mutilates the tongue, so as to be a great source of annoyance to the patient while convalescing. I believe this instrument should be relegated from every operating room. The tongue seldom requires bringing forward if the anesthetic is skilfully given. If a gas jet is burning in a room where chloroform is used, proper ventilation should be provided, as the fumes break up into acetylene and chlorine gases which are irritating to the throat and lungs and very depressing to the patient. The respiration should not be embarrassed by leg supports which pass around neck and shoulder. The best supports are those which are attached to the table, or another kind may be used in which a belt passes around body at umbilical region and legs attached to band by strap.

STIMULANTS.

The indiscriminate using of stimulants is a harmful practice and one that should be discouraged. Frequently patients are stimulated when it is entirely unnecessary. If the pulse in an adult should reach 130 to 150, the patient should be permitted to come from under the anesthetic a little or, if you please, "kept a little closer to shore," and allowed more air. In doing this, oxygen is introduced into the system, one of our best stimulants. This will frequently bring the pulse down to 90 or 100. If the pulse still keeps up under anesthesia, chloroform being used, resort to ether. This change will sometimes work wonderfully well. If it is still necessary to use a stimulant, strychnine, 1-30 to 1-20, repeating if necessary, may be administered. If the circulation is much depressed, use atropine.

This contracts the arterioles and veins. Digitalin is also a good stimulant. Hot injection of normal saline solution into the peritoneal cavity or by bowel or transfusion may be employed. Heat over heart area is a convenient and very useful remedy. Nitrites or alcohol should not be used in deep narcosis, as they will increase the difficulty.

RELATION OF ANESTHETISER TO OPERATOR.

If he is inexperienced, he will need instruction and be grateful for it. Occasionally he will need reprimanding and possibly censure. If so, he should take them silently: but, let it be remembered, he does not need abuse. If the surgeon so far forgets himself as to resort to it, the anaesthetiser had better resign his position to some one who, possibly, will not object to abuse. A man in any position can command respect, and if he does not, the fault is his own. Some operators delight in using caustic remarks—often from habit—and frequently without cause. This should not confuse one, as neither you nor your patient can afford it. The anaesthetiser should have the entire confidence of the surgeon, and, in order to possess it, he must be skilled. No person appreciates a competent anaesthetiser more than the surgeon who wishes to concentrate his whole thought and attention on his work. It is almost impossible for him to do good work, if he has to be continually on the lookout for his patient's condition. The anaesthetiser should know more, or at least as much about anesthesia as the surgeon. He should always know the condition of his patient and when questioned regarding him, should answer in no uncertain tone. Often the tone of his voice will indicate whether he can be depended upon or not.

CONCLUDING REMARKS.

I have purposely left out the accidents that occur during anesthesia and their treatment as it would make my paper too long and besides they can be read in almost any text-book. Dr. Parmenter of this city has written an article, published in April, 1896, in the *BUFFALO MEDICAL JOURNAL*, in which he gives a prominent part to the accidents and their treatment. A good anaesthetiser will give his whole attention to the patient, not following the steps of operation, or allowing anyone to converse with him. In trivial operations, we sometimes see a desire on the part of the anaesthetiser to treat the anesthesia as trivial, but every anesthesia, no matter how trifling the operation, should receive undivided attention. All the indicators of the patient's condition should be carefully watched. Observe the

color of the face, lips and nails, watch pulse, character of respiration, reflexes, oscillation of the pupils and rigidity of the eye. He should know his subject thoroughly and have his knowledge always available. He should keep cool, think carefully, decide wisely and act promptly.

An anesthetiser should be compensated for his work. I have known of cases where the operator received for his operation from \$50 to \$200 and the anesthetiser from \$3 to \$5. In fact, he is lucky if he receives anything at all. This is a fair example of how things exist today. It seems to me that when people are able to pay such prices for operations, they should also give the anesthetiser a reasonable compensation.

Finally, I have not attempted to present an exhaustive bibliographical article, but one which is purely clinical, and in closing cannot do better than reassert that upon no condition does the welfare of the patient depend more than upon the skill, ability and discretion of the anesthetiser, and that nothing is more fallacious than that an anesthetic can be given in the haphazard way we often see it done.

158 NORTHLAND AVENUE.

NERVOUS DYSPEPSIA.¹

By B. C. LOVELAND, M. D., Syracuse, N. Y.

NERVOUS dyspepsia, otherwise called neurasthenia gastrica, is a functional neurosis, and may be considered as a distinct variety of neurasthenia. It is not the purpose of this paper to discuss neurasthenia of this or any other variety as an individual entity or disease, but to study this particular condition from the standpoint of practical experience.

Nervous dyspepsia is important, not only by reason of its frequency, but from the fact that it is so often intractable under the ordinary remedies. Many times it is not properly diagnosed, and frequently it is mistaken for more serious disease. The causes that are responsible for nervous dyspepsia are, heredity or the nervous temperament, business worry, nervous shock, family cares, sedentary habits, insufficient muscular exercise, hastily eaten or improperly selected food, and an insufficient amount of water. In fact, any of the causes which so frequently lead up to other forms of neurasthenia. The symptoms commonly present are an unusual attention to the matter of digestion, a feeling of load or weight in the region

1. Read at the thirty-second annual meeting of the Medical Association of Central New York, at Syracuse, October 17, 1899.

of the stomach, eructation of gas, usually tasteless and often odorless. In the latter case the gas is only air which has been partially swallowed, and regurgitated in the effort to relieve the stomach of the feeling of weight. The patient also complains of slowness of digestion, and believes that one meal does not leave the stomach till the time for the next arrives. Beside the eructation of gas there is often eructation or regurgitation of food (not vomiting), the regurgitation occurring almost immediately after meals, and the food materials brought up being practically unchanged. The worst distress is generally complained of two or more hours after meals, and the patient also frequently says that as soon as he has begun to eat he feels full. Constipation, nervous and mental depression and insomnia are sometimes but symptoms of nervous dyspepsia. Such patients often come to us having cut off one thing after another in diet, and reduced the quantity of food until they are much emaciated, and they are fortunate if they have escaped the fad of abstaining from breakfast and similar absurdities, beside trying the numerous so-called dyspepsia cures so much advertised. For the more of such things they have tried the worse they are, and the more difficult it is to get them back into normal conditions and habits.

On physical examination such a patient will usually show a flabby skin, more or less sallow in color, a poorly developed muscular system, flaccid abdominal walls, and, by percussion, or auscultatory percussion, a dilated and displaced stomach will often be noted. And not infrequently a displaced kidney and displaced intestines may add to the picture. If the case is one of long standing much emaciation may, or may not, be present, depending on the degree to which the patient has restricted his diet. The appearance of the tongue is characteristic, but varied. It may be clean, red, with enlarged and congested papillæ on the tip; or a dull purplish color, thick and flabby, and marked with indentations by the teeth; or again, it may be "mapped," or coated white, with three or four spots of bright red, usually oval or circular in shape, situated on its anterior half. Any of these appearances may be present according to individual conditions or peculiarities. Repeatedly on making an examination of the stomach contents after a test meal they have been found normal in acidity and digestive elements, though occasionally absent, or marked reduction of the proportion of hydrochloric acid has been noted, as also hyperacidity. In other words, the contents of the stomach are usually found normal, though varying occasionally in the same individual, even at different times. From what has

already been said it will be obvious that there are no pathological changes in the tissues of the stomach present in this disorder, and that it is a purely functional disease.

The rational treatment is, of course, to find the causes operative in each individual case and remove them if possible, and if this is impossible, contrive some means of obviating their effects. Counsel the patient to maintain a more serene state of mind, more freedom from worry and anxiety, to give more time to eating, and to preserve that time free from worrisome conversation, not to read the paper while eating; to use reasonable care in the selection of foods and once having eaten a meal to forget all about it, and occupy the mind with other things. Correct such bad habits as the regurgitation of food, or the eructation of gas, as in most instances it is unnecessary, and does not bring the hoped for relief. Tell the patient to eat what he can keep down, and keep down what he eats. Direct accurately the patient's dietary for the purpose in part of giving him less to think about and worry over. Few things that are wholesome for anyone to eat need be absolutely cut off if the patient is willing to obey orders thoroughly, but at first, for obvious reasons, it will not be best to give him too much liberty in choosing his variety. He may, however, be urged to eat as freely as his system may require, irrespective of his appetite, but when crowding the stomach in this manner a very simple diet must be used. Of course, a special diet list must be made for each individual, hence a general diet list in this paper would be impossible. It may be said, however, that sugar, sweets, pastries, fried dishes, and all but the plainest soups should be avoided, but can again be given, if the patient can be induced to make a radical change in his habits, like taking him from the office or professor's study and putting him into active work on a ranch, or its equivalent in such out-door exercise as horseback riding, walking, or cycling, three or four hours a day.

The results of any kind of out-door exercise will be better in proportion to the amount the patient takes (up to that just mentioned) and to the interest the patient takes in it. Hence the importance of prescribing an exercise that will be congenial to the patient, and for this reason the physician needs to know the advantages and disadvantages of the available out-door sports, for this class of patients often need to be convinced of the utility of such sport as well as the pleasurable quality of it. Where such a radical change in the habits and associations is impossible many things may be done to take the place of such change with varying degrees of benefit. Among

these calisthenics, especially adapted to strengthen the muscles of the trunk and abdomen, hold an important place. Individual conditions would call for alterations, but a sample of such exercises would be as follows: flexion and extension of the arms and legs while standing, rising from a sitting posture (squatting down and rising up), bending forward and backward, bending sideways, first one side and then the other, lying on the back and elevating first one limb and then the other, and, finally, respiratory movements, deep and forcible. These last may often be taken best while lying on the back, as follows: hands down at sides, or clasped in front, as inhaling begins slowly raise hands, continuing until when the lungs are filled the hands touch the floor or couch on which the patient lies, as far as he can reach above or beyond his head. Return to former position while slowly exhaling. It is well to prescribe only about three such movements of a kind at the beginning, increasing as the strength increases, possibly adding one each day.

Faradic electricity is also of great value in restoring tone to the abdominal muscles, and I believe to the muscular structure of the stomach and intestines. If constipation exists, which cannot be overcome by the diet, exercise and electricity, phosphate of soda, grains 15, taken in a glass of hot water before each meal, will usually be found sufficient aid till the muscular activity of the alimentary tract has been restored. *Nux vomica*, in some form, is perhaps the remedy applicable to most cases, and the writer has used as frequently as any one prescription in this class of cases, the following: Pulv. *rhubarb*, soda bicarb., of each dr. $\frac{1}{2}$, ext. *nux. vom.*, gr. 6. M. div. in capsules, No. XXIV. S. Take one after each meal.

The results of the method of treatment described have been very satisfactory, and so far as it is possible to attribute results to any part of the management, it would seem that the success depended far more on the thoroughness with which the details of the patient's condition and habits of life were considered, or the careful physiological inventory taken, and the definite prescribing of new and better habits, than on the medicine given. For in some of the most emaciated and distressing cases no medicine has been given, simply diet and living in detail has been prescribed. Case reports might be added, but the paper has already reached the time allowed, and they will be omitted.

608 SOUTH SALINA STREET.

DISCUSSION.

Dr. BENEDICT, of Buffalo.—The doctor has given us a very interesting paper, and because it is interesting and good, it is possible

to develop a little discussion on one or two points. I think that the only point that the doctor mentioned on which I radically disagree with him is on the use of soda. I cannot imagine any condition where we need to use *nux vomica* in which we would also want to use soda. Of course, there may be a case of superacidity in which we might need later to give soda to decrease the acidity, but in that case, we should have to be very careful to avoid any possible drug like strychnine that would increase the activity of the stomach. Of course, we all know physiologically that the stomach cannot digest until it is acid, and if the stomach is sour from organic sourness, it is no use giving soda, except as a very temporary relief.

There is one point—I think the doctor will agree with me here—and that is that the term “nervous dyspepsia” is a little bit misleading. It is something like “typhoid pneumonia.” When we say “typhoid pneumonia,” we are not quite sure whether we mean typhoid fever, complicated with pneumonia, or whether we mean a pneumonia that is in an extremely bad condition. So with the term, “nervous dyspepsia.” Any dyspepsia is nervous; that is, any condition of the stomach that is not organic and hence is properly termed dyspepsia, and must be due to some nervous state. If we mean that the patient is nervous, I think we had better say that. You may say that is simply harping over a term, but there is this one practical point. I sometimes have patients referred to me with what might be termed “nervous dyspepsia.” If I find that their stomach is normal in area, that there is no dilatation, that there is no special tendency toward vomiting, I say the less that patient knows about his stomach, the less he thinks about it, the less he has to do with me the better. Simply turn him or her back to the proper channel and have the treatment directed entirely away from the stomach. Quite recently, I have had two such cases referred to me, one a man, by a nervous specialist, the other a woman. In both cases, the patient was absolutely normal. I think it would be incorrect to call or treat such cases as nervous dyspepsia.

A PLEA FOR THE MORE FREQUENT USE OF ATROPIN IN SO-CALLED “OPHTHALMIAS.”¹

By LUCIEN HOWE, M. D., Buffalo, N. Y.

IT IS the experience of every ophthalmologist to see patients who have been treated with astringent lotions for a so-called “ophthalmia” or conjunctivitis, whereas an examination shows at once, that if the conjunctivitis existed at all it was only of secondary importance, and that the disease is in reality an iritis of some form. It shows frequently, too, that the iris has become attached to the

1. Read at the thirty-second annual meeting of the Medical Association of Central New York, at Syracuse, October 17, 1899.

anterior capsule of the lens, forming synechiæ more or less complete, the pupil may be partly filled with an exudation and vision therefore impaired—always temporarily and sometimes permanently. Now in these cases, the simple fact is, an error has been made in diagnosis and therefore in treatment. When that is discovered the physician is naturally troubled, the ophthalmologist is much embarrassed in the efforts he should invariably make to protect the credit of a brother practitioner, and all the while the patient wonders at the sudden change in treatment, plying both the new adviser and the last one with questions to know why this change is necessary, and whether his unfortunate condition is not due to the use of astringents, when he should have had atropin. These are annoying and embarrassing cases, but unfortunately they are still quite common and come to the ophthalmologist often from practitioners eminent for learning, for skill and for ability in other departments of medicine.

It is therefore not out of place to consider so elementary a subject as the differential diagnosis between conjunctivitis and iritis, and to add a single practical word concerning the treatment of doubtful cases. Ordinarily this differential diagnosis is, of course, easy enough. Sometimes an inflammation may develop which at first is not distinctly characteristic, and occasionally a form is seen which at first may deceive even the very elect. Indeed a pure iritis may subsequently be accompanied by a conjunctivitis or the reverse.

It may be useful, therefore, to arrange side by side the two groups of symptoms, as has been done seldom, if at all, in the text-books. Thus we would have an outline like the following :

	<i>Conjunctivitis.</i>	<i>Iritis.</i>
Vessels	{ Superficial Tortuous Dark?	Deep. Straight. Lighter red.
Pain	Smarting	Dull and persistent.
Swelling	of conjunctiva	of iris.
Mydriatic makes pupil . . .	{ Round and large	{ Irregular or unchanged.
Vision	Normal	Impaired.

Such an outline explains itself and only a word is necessary in regard to one or two points. It will be remembered that while the blood supply to the conjunctiva comes from the lid and the adjacent structures, the supply to the iris and also indirectly to the cornea, is through the ciliary arteries. These pass close to the sclerotic, pierce that coating near the margin of the cornea to be

distributed onto the iris. We therefore have the conjunctival vessels more superficial, rather tortuous and apparently of a darker color than the ciliary vessels, which lie deeper, run almost straight to the scleral margin and are of a bright rose red. Where doubt exists as to which class these vessels belong, a magnifying glass is of decided advantage. Particularly useful for this purpose is the large horizontal microscope for viewing the eye, made by Henry L. De Zeng, and first described by me in the *New York Medical Journal* of June 17, 1899. The other points of differential diagnosis are sufficiently indicated by the outline given above.

Having thus cleared up the ground as to the differential diagnosis, the question of treatment can be briefly disposed of. In earlier times the practice of ophthalmology was confined principally to diseases of the conjunctiva and treatment of the eyes meant practically the use of astringents. Unfortunately, today the same holds true to a certain extent and in cases of any doubt the practitioner is inclined to use some astringent solution, usually a grain of zinc sulphate to the ounce of water. Now, the object of this short paper is to say that by using astringents we not only do positive harm, if there is any iritis present, but also lose valuable time while adhesions between the iris and capsule of the lens may be forming. On the other hand, if a weak solution of atropin is used, it can do a conjunctivitis practically no harm and is always of advantage for an inflammation of the iris. It is true, in old persons where there is the least tendency to hardness of the globe, one should be careful in advising mydriatics as tending to increase a glaucoma which may have existed even in a latent condition; but with this single exception the rule should be to use a mydriatic first and the astringent later, if the latter is necessary. The temporary inconvenience of a dilated pupil is a mere trifle, compared to the responsibility of the practitioner and the danger to the patient when a mydriatic is omitted where it should have been used.

It is therefore fair to say that if more use were made of mydriatics and less of astringents, there would be less confusion to the general practitioner, less embarrassment to the ophthalmologist and much better vision for the patient. Hence this plea for a change in the usual plan of ophthalmic treatment—a change which might be expressed by the formula, "When in doubt, use atropin."

NOTE ON SPERMATOCELE WITH CASE.¹

By J. HENRY DOWD, M. D., Buffalo, N. Y.,

Genito-urinary surgeon to Buffalo Hospital Sisters of Charity.

THE specimen that I present for your consideration was obtained from a patient giving the following history :

J. H., aged 47, single; occupation, pipe line walker, oilfields, Pennsylvania. Family history negative; personal history and appearance that which is only found in persons whose occupation keeps them continuously out of doors.

About June 15, while walking through a ravine, caught his foot in a twig, falling forward and striking, but lightly, against a fallen tree, which touched the body about its center. At the time he noticed a slight twinge of pain in the right testicle, but nothing that prevented the continuing of his journey. That evening he noticed considerable swelling, but this was painless and gradually disappeared, leaving only a small rounded body, the size of a hickory nut. This swelling persisted, but in no way interfering with his occupation, which consisted in walking about eight or ten miles daily over very rough roads. On July 19th, he came into my ward at the hospital, not for any physical suffering, but for advice and to allay the mental anxiety that the growth might destroy the gland. After a careful examination of testicle, prostate and vesicles a diagnosis of spermatocele was given, with the suggestion that it could be removed and in no way interfere with the sexual function or destroy the gland. Consenting to its removal on July 21st, chloroform was administered and the dartos laid open down to the tunica vaginalis. Here it was found that although the growth lay behind this, it would not be possible to reach it without cutting through the latter. This was done, both layers being divided and the pedicle—if such I may call it—was ligated and cut away from its connection, with the head of the epididymis (*vas efferentia*). In doing this the knife accidentally cut through the very thin wall, but my house surgeon, Dr. William Gerber, who like many others was very sceptical of the diagnosis, caught the fluid, later examining it and proving the correctness of my opinion.

The two layers of the tunica were sewed with fine gut and the dartos with an uninterrupted suture was closed over all. Healing took place by first intention, the patient being up on the fourth day, and leaving for home three or four days later with only a slight induration of the cord, which rapidly passed away.

Although this growth would appear of trivial importance it should receive most careful consideration for several reasons :

1. It is probably one of the rarest forms of tumor found in the

¹. Read at the thirty-second annual meeting of the Medical Association of Central New York, at Syracuse, October 17, 1899.

body and especially of the scrotum. This statement can be substantiated by reference to any authority on genito-urinary surgery.

2. Its liability to rapid growth, attaining at times the size of a cocoanut.

3. Springing as it does from the vas efferentia there is but one result of unobstructed enlargement, atrophy of the testicle. These growths appearing, as they do, in the prime of life, when the sexual function is at its best, atrophy of the testicle can only be followed by that train of symptoms so peculiar and trying to those who treat their possessor.

4. The usually advised treatment, that of tapping, is too often followed by relapse and Volkmann's method, similar to that for hydrocele, necessitates a quite long continuance of dressings, and the like.

These tumors can be carefully dissected from their bed, either from behind or through the tunica vaginalis, as in my case. Much care should be used if our choice is the latter, for healing by first intention is all important in this, preventing scar tissue or testicular adhesions, which are so often followed by glandular (testicle) neuralgia.

288 FRANKLIN STREET.

TESTS FOR ALBUMINS.

A LECTURE DELIVERED BEFORE THE SCHOOL OF NURSES, BUFFALO
HOSPITAL SISTERS OF CHARITY, OCTOBER 25, 1899.

By BYRON H. DAGGETT, M. D., Buffalo, N. Y.

ALBUMIN is not a normal ingredient of the urine, hence its presence in this secretion indicates some disturbance of function, if not some organic lesion. Our purpose today is to study methods of testing for albumin in the urine and of the ways of differentiating its various forms, rather than to discuss its significance or its sources.

Albumin is a proximate principle, a product of life, an amorphous, crystallisable substance, formed of carbon, hydrogen, nitrogen, oxygen and sulphur. It is soluble in strong acids and alkalies. Albumin is a complex substance and is arranged by both animal and vegetable life.

It occurs in the egg, blood, lymph, chyle, all serous fluids, juices of the flesh, in the brain, the pancreas and in all transudations from the bloodvessels and lymphatics. Its elements are the same under

all conditions, only varying in their relative proportions. If it does not contain all of these elements it is not albumin. It mixes with other substances without disintegration. There are different forms of albumin, possessing varying properties, due to the different proportions of its elements, just as there are different forms of alcohol and other hydrocarbons, due to the varying properties of their essential elements, carbon, hydrogen and oxygen.

Serum albumin, occurring in albuminuria, is derived from the blood serum. It resembles egg albumin and chemically it is a weak acid. It is not coagulated by water and with difficulty by hydrochloric acid. It is readily precipitated by nitric acid and is redissolved by an excess of the reagent. Serum albumin is an essential part of the blood. Its persistent presence in the urine, or its existence in quantities more than a trace indicates serious disease; the greater the quantity the more grave is the condition, although in contracted kidney it is absent at times or present in small quantities.

The sifting of serum albumin through the kidneys in amounts exceeding 1-30 to 1-40 per cent. is a storm signal of danger (Purdy). It not only indicates kidney degeneration and lessened function, but it causes a loss of the vital part of the blood. The other albumins which occur in the urine are called nucleo-albumins or proteids, such as the albumoses, peptone, mucin, catarrhal secretions, and excessive activity of the sexual and urinary glands. The nucleo-albumins are wayfarers along the urinary highways and bear a significance very different than does the presence of serum albumin, although albuminuria is often one of the manifestations of serious disease, not renal. Serum albumin in the urine, not due to hemorrhage into the urinary tract, indicates kidney lesion and as a concomitant result the non-elimination of the poisonous waste and decay of the system. The kidneys also eliminate poisons other than those elaborated by physiological processes. The kidneys are the great safety valves of our bodies, which are workshops of construction and repair and charnel houses of waste and decay from the cradle to the grave.

Albumose and peptone are formed during digestion of proteid foods, albuminous foods. There are different forms of albumoses, but there is no need of distinguishing them for our purpose in testing for albuminuria, since they behave much alike to chemical tests and have, so far as we yet know, an obscure pathological significance. The complete qualitative and quantitative chemical analysis of all of these substances have never yet been made by human hand. We will classify the albumoses and peptone as nucleo-albumins and

learn to distinguish them from serum albumin. Serum albuminuria points to renal lesion, nucleo-albuminuria points to other lesions beyond or below the kidneys. The nucleo-albumins are found in the urine in tuberculosis, in acute rheumatism, in ulceration, endocarditis, in convulsions, also as a result of the injection of the organic antitoxins for the relief of certain diseases, due to microbic infection. Their presence warn us that severe tissue changes are in progress. Albuminuria in any form—nucleo- or serum—is a danger signal. Serum albumin and nucleo-albumin enjoy a blood' relationship and frequently travel together in the urinary avenues. The kidneys not only eliminate the products of physiological waste and pathological debris, but also deleterious foreign matters which gain access to the system in various ways. The normal functioning of the kidneys is essential to health, and attention to their action is demanded in all cases of sickness, whether it be due to kidney disease or any other malady.

Careful testing of the urine often supplies the missing link in the diagnostic chain. Testing for albumin in the urine is a chemical process, and chemistry is an exact science, but remember, in order to obtain exact results, your method must be exact, your chemicals pure and your manipulations faultless.

Purdy alleges that if the amount of serum albumin exceeds one-third of 1 per cent. it indicates a pathological condition. Jaksch, in his work on clinical diagnosis, says: "Serum albumin in notable quantity is never found in healthy urine." Serum albumin found in renal albuminuria is usually the result of inflammatory and degenerative changes in the kidney.

Samuel West, in a paper read before the London Medical Association, said: "That granular kidney—a form of Bright's disease—is a disease of more importance and exists more frequently than is generally supposed, since it is frequently unrecognised. It is often unsuspected until demonstrated by post mortem examination. It is found after death in other diseases, which might have resulted fatally, but for the presence of granular kidney. It is often overlooked; it is often unexpectedly found; it often supplies the missing link in obscure cases." Post mortem revealed granular kidney in a large percentage of 79 cases—excluding children under five years of age—brought to St. Bartholomew's Hospital, either dead or dying. 48 per cent. had chronic interstitial nephritis, which was the only cause of death in 16.8 per cent. It was the sole or contributing cause of death in 38.4 per cent. of these cases. 10 per

cent. of 100 fatal cases of acute pneumonia showed, upon post mortem, granular kidney.

Dr. Purdy, author of practical urinalysis and urinary diagnosis, reports numerous cases of urinary disease, for which the sufferers sought relief in vain through two continents, to learn at last that they were dying of Bright's disease.

These things show the importance of urinary examination and the detection of albumin, hence a review of the more common tests employed is practically useful. All the common tests depend upon the formation of a cloud or precipitate, but the urine must be clear or the precipitate is obscured. The urine if clouded or opaque must be made clear by one or two filtrations through filter paper. Filtration does not clear the urine if the opacity or cloudiness be due to microbes or the result of decomposition. In this event, it has been advised to clarify the urine by the addition of chalk, magnesia, or a 5 per cent. solution of naphthalin, but as these substances derange the reactions of the chemical agents, it is better to use the Chambord-Pasteur filter. However, you will not be called upon to apply this process or to do more than use the paper filter, and even this is not often necessary.

To be exact, the sample for testing should be taken from the mixed product of twenty-four hours. While normal urine in the bladder is said to be both aseptic and antiseptic, yet it is very prone to infection and decomposition which renders it baneful. The total production for twenty-four hours should be accumulated in a glass vessel—the crystal water bottle fulfils the indication—with a capacity of at least three pints a few grains of chloral put into the bottle is a good preservative. A ready method of estimating the amount of solids is as follows: Multiply the last two figures of the specific gravity by the number of ounces passed in twenty-four hours and this product by 1.10.

Urinary insufficiency is indicated not by the bulk of water, but by the amounts of solids present in the secretion. There are two methods and many reagents used in testing urine for albumin. One method is by a mixture or diffusion of urine with the reagent. This is the method usually employed and is satisfactory unless there is a scant quantity of albumin. In this method the reagent is added directly by dropping it into the urine to the required amount. The other method is by contact. In the contact method the reagent is first placed in the test-tube and the urine is trickled along the tilted tube and floated over the surface of the reagent with contact, but not

mixture. With this plan it is difficult to avoid blending or mixing of the fluid. It is not an easy matter to get contact without mixture; the commingling of the fluid will often occur in spite of careful manipulation.

In order to obviate this difficulty, the use of an ox-bow shaped test-tube, with a long and short arm, has been proposed. The curved portion is drawn into a capillary tube, about 1-16 of an inch in caliber. This formation lessens the tendency to admixture. Cover the mouth of the long arm with the finger and drop the urine into the short arm. Before uncovering the long arm, place the finger of the other hand over the mouth of the short tube and drop sufficient amount of reagent into the long arm to raise its level higher than that of the urine, then rotate the finger covering the short arm, so that the reagent shall pass through the space and force the urine to a level with itself. This manipulation brings the point of contact up into the enlarged portion of the tube and avoids blending of the fluids.

There is usually no difficulty presented in testing for albumin in the urine containing a large percentage of this substance, but when there are only traces which are obscured by other precipitates, great care is necessary and it is also essential to examine by several tests to be certain of the results. Urine is a variable and complex fluid and chemical reagents produce precipitates with other ingredients than albumin. It is said that reactions occur by many of the more delicate tests with normal urines from persons in sound health. This is stated to be due to mucus. It has been demonstrated, says Cammidge, that all urines contain small quantities of proteid material (nucleo-albumin) derived (supposedly) from the cells lining the urinary tract. Mörner demonstrated that urinary mucus was not identical with true mucus; that it is modified by combination with chondro-sulphonic and nuclinic acids; at all events it is classified as a nucleo-albumin or proteid, and so far as testing is concerned it need only be distinguished from serum albumin.

Under some circumstances and in inflammatory conditions of the urinary tract the substance may be present in sufficient quantity to respond to tests for renal albumin and obscure the results. Nucleo-albumin, unlike sero-albumin will precipitate with vegetable acids and the lighter or thinner the urine the greater the precipitate. Nucleo-like sero-albumin is precipitated by dilute mineral acids and unlike sero-albumin by alkalis, at least to a less degree. True mucus exists in small quantities in the urine, and its reactions are the same

as those of the nucleo-albumins. In fact it is a nucleo-albumin. In making tests there is no purpose in distinguishing between mucus and nucleo-albumin, or differentiating serum albumin and globuline, for we do not know the pathological significance attached to one more than the other of these two substances (Cambridge). It is sufficient to know that they are serum albumin. The nebula or mucus cloud deposited by standing urine may be distorted epithelial cells or nucleo-albumin of another form.

The albumoses and peptone are found in the urine during suppurative processes and acute infectious diseases. They are the result of digestion of the albuminous foods and pass to the kidneys by way of the absorbents, lymphatics and the circulation of the blood. They are nucleo-albumins and precipitate with heat and mineral acids, obscure the serum albumins, but they disappear with boiling and reappear upon cooling. To eliminate the albumose, boil and filter while hot. Kuhn states that true peptone does not occur in the urine. Peptonuria is probably albumosuria and not an uncommon source of error when testing for renal or serum albumin. Various remedies produce conditions of the urine which obscure the tests for albumin by precipitation, such as the pine acids, the iodides, some of the balsams, while other drugs incite the elimination of serum-albumin itself. All these circumstances must be taken into consideration, several different tests applied and repeated if necessary to clear up all doubts in obscure cases.

Joles, in the *Baltimore Underwriter*, says that a reliable and available albumin test must be colorless; the reaction must show the minutest traces, so that its negative results indicate conclusively the absence of pathological traces of albumin, and finally the reagent must be independent of the compensation of the urine. He gives this formula :

R Hydr. chlo corros.	10
Acid succinic	20
Natr. chlor.	10
Aqua dist.	500

But it fails in alkaline urine, in the presence of mucin, phosphates and ammoniacal compounds and in the presence of iodides. All these substances must be disposed of before adding the reagent. To carry through this test requires the services of a chemical engineer and the paraphernalia of a laboratory. It is very delicate and will show albumin when present in 1 part to 120,000 of urine. It is too complicated for a bedside test.

Now it is in order to review ten or twelve of the many tests proposed :

1. *Heat.*—The heat test is generally employed. The reagent is obtainable in any household. It is delicate and under favoring conditions a very reliable test. One of the conditions for a favorable test is acid urine. In alkaline urine the albumin precipitate is obscured by other precipitates. You may acidulate the urine before heating or clear the field by acid after applying the heat. Heat precipitates the phosphates, if the urine be neutral or alkaline. Excess of acid interferes with the success of the test, since serum albumin is redissolved by excess of acid. You may get a precipitate of carbonates by heat, but acid will dissolve them, producing effervescence. Turbidity of cold urine is due to urates, nucleo-albumin or putrefactive germs. Heat will clear the turbidity due to urates, but not that due to organisms; chemicals may be employed; calcined magnesia or a few drops of caustic soda; after adding the soda shake and let it stand for a while and filter again. Slight turbidity, due to albumin plus heat is best seen by daylight; it may be overlooked by artificial light. Heat alone is not satisfactory as a test for albumin, but heat and acetic or nitric acid is the test usually employed.

2. *Heat and Acetic Acid.*—First take the reaction, if alkaline renders faintly acid. Boil the urine in a test-tube, and if no precipitate be formed add a little more acid; if no precipitate appears boil again. Heat alone will not precipitate all nucleo-albumins or proteids, but acetic acid will do so, especially in dilute urines and the turbidity produced thereby is indistinguishable in appearance from that due to small amount of serum albumin.

3. *Heat and Nitric Acid.*—Nitric acid does not so readily precipitate nucleo-albumin, but it forms with serum-albumin a coagulum, which is soluble with excess of acid. Bring the urine to the boiling point and add nitric acid drop by drop and very small amounts of albumin may be shown.

In concentrated urines nitric acid may produce powdery precipitate of urates which should be filtered off, or first dilute the urine and no urate precipitate will form. Precipitates are formed in the urine with nitric acid after the use of turpentine, benzoin, cubebs, copaiba, storax, santal and other balsams, all of which are soluble in alcohol. Nitric acid will produce a precipitate in strongly bilious urine, also soluble with alcohol. These tests are delicate and simple, but there are many objections to them.

4. *Cold Nitric Acid (Haller's test).*—This is not as delicate as the

others, but is sufficiently so for practical purposes. This test is applied by the contact method; a characteristic ring forms at the point of contact if serum-albumin be present. A second ring, less intense, forms a little higher up characteristic of nucleo-albumin, if that substance be present (Cambridge).

Instead of the second ring a diffuse haze sometimes forms in the presence of nucleo-albumin. Dilution of the urine diminishes the intensity of the serum albumin zone or ring and intensifies the nucleo-albumin opacity, which forms the second ring. The urates and resin acids are also precipitated by this test, but they are soluble with alcohol. Bilious urine forms colored rings with cold nitric acid contact. Peptone and the vegetable alkaloids are unaffected by the cold nitric acid test.

5. *Potassium-ferro-cyanide and Acetic Acid Test.*—This test is simple, delicate and extensively used. It is best used as a contact test. The mixture is one part of acetic acid and three parts of potassium ferrocyanide. At the point of contact with the urine, if serum-albumin be present a white ring quickly forms. Nucleo-albumin is not precipitated in the presence of an excess of potassium ferrocyanide. Concentrated urines should be diluted with distilled water. If the zone does not appear promptly wait a few minutes, as the precipitate forms slowly in the presence of a scant amount of albumin. This compound is not very stable and should not be heated. The phosphates, urates, alkaloids and peptones are not precipitated by this reagent, while the resin or pine acid are precipitated.

6. *The Salt and Acetic Acid Test.*—The salt solution is first added to the urine in excess; that is, the amount should be about half the volume of the urine and well shaken, then add the acetic acid and heat. The nucleo-albumin is not precipitated. This is a decided advantage. These reagents are found in every household and the test made by boiling over a lamp or stove. The fluid is then poured into a glass, so as to be inspected by transmitted light. After diffusing the albumoses by heat, if the serum albumin precipitate be scanty, it is best found by means of daylight. The zone tests are preferable, but are not always available.

7. *Salicyl-sulphonic Acid Test.*—Cambridge claims that this is the freest from objections and the most convenient of all known tests; that it is cheap, clean and certain in its results. It may be used as a solid or in solution. It can be carried in a small tightly stoppered bottle (it is hygroscopic) and a crystal dropped into the urine to be

tested. It acts equally well in acid and alkaline urines. Its use requires no special apparatus, except in the presence of albumose, when heat is necessary. Albumin and nucleo-albumins are quickly precipitated if present, but the nucleo-albumins are dissipated by heat, leaving the serum albumin diffused through the fluid, subject to inspection. It does not precipitate phosphates, urates, uric acid, bile, alkaloids or drugs. Its very delicacy is an objection since it renders albumin in quantities too small to be of pathological importance. The most serious objection, says Cammidge, is that it so readily precipitates nucleo-albumin or proteids which can not be distinguished from serum-albumin, except in the presence of heat. This objection is overcome by using Haller's cold nitric acid test, in doubtful cases. Again the inferior delicacy of the nitric acid test is a safeguard so that too much importance is not given to a mere trace of albumin. The nitric acid test alone may lead to error as a confirmatory test, but the errors are easily avoided. The salicyl-sulphonic acid sometimes gives a faint haze with normal urine, due to the presence of some form of nucleo-albumin, but with this exception all precipitates are due to albumin and albumoses.

8. *Trichloroacetic Acid Test* precipitates everything except the albumoses.

9. *Picric Acid Test*, delicate, but uncertain.

10. Millard's reagent is composed of phenol, acetic acid and caustic potash.

11. Taneret's is composed of potassium, mercuric iodide and acetic acid.

12. Speigler's reagent, is composed of corrosive sublimate, alcohol and glucose.

There are many other tests.

I will resume this subject at some future meeting and demonstrate the use of the following tests :

1. Heat. Advantages and disadvantages.
2. Heat and nitric acid. Advantages and disadvantages.
3. Cold nitric acid. Advantages and disadvantages.
4. Potassium ferrocyanide and acetic acid. Advantages and disadvantages.

5. Salicyl-sulphonic acid. Advantages and disadvantages.

What are confirmatory tests ?

Under what conditions are they indicated ?

Serum albumin in the urine; its best test and significance.

Nucleo-albumin; its test and significance.

How would you distinguish between these two substances?

What is the source of serum albumin found in albuminuria?

What is the source of nucleo-albumin found in albuminuria?

Society Proceedings.

MEDICAL ASSOCIATION OF CENTRAL NEW YORK.

Reported by C. A. VAN DER BEEK, M. D., Secretary.

THE thirty-second annual meeting of the Medical Association of Central New York was held at the Yates Hotel, Syracuse, October 17, 1899.

The meeting was called to order at 10.55 a. m., by the president, Dr. E. L. MOONEY, of Syracuse.

THE PRESIDENT.—The first order of business is the reading of the minutes of the previous meeting.

The secretary, Dr. VAN DER BEEK.—Inasmuch as a stenographic report of the minutes of the last meeting was published in the transactions and a copy sent to every member in attendance, I would move that the reading of the minutes be dispensed with. Seconded and carried.

The president appointed the following committees: *Business Committee*.—F. W. Sears, Onondaga; Wm. A. Howe, Ontario; A. A. Young, Wayne.

Committee on Credentials.—H. L. Chase, Wayne; E. W. Ruggles, Monroe; Frederick Preiss, Erie.

Reception Committee.—D. M. Totman, E. J. Wynkoop, H. B. Hawley, Onondaga;

Committee on Ethics.—Lucien Howe, Erie; J. P. Creveling, Cayuga; Nathan Jacobson, Onondaga.

Publication Committee.—Wm. C. Krauss, Erie; S. L. Elsner, Monroe; C. A. Van der Beek, Monroe.

Dr. JOHN GERIN, of Auburn, first vice president, was called to the chair while the president delivered the annual address on The attitude of the general practitioner toward the specialist.

Dr. SEARS, Onondaga.—Mr. vice-president, I move a vote of thanks to the president for his address. Carried.

The following members and delegates registered :

Broome.

Seymour, R. A.

Cayuga.

Austin, L. E.

Gerin, John

Hall, A. L.

Laird, W. R.

Chenango.

Phelps, R. H.

Cortland.

Andrews, L. C.

Foosher, F. H.

Higgins, J. W.

Erie.

Benedict, A. L.

Fronczak, F. E.

Howe, Lucien.

Krauss, Wm. C.

Fulton.

Bacon, C. Y.

Genesee.

Wm. D. Johnson.

Madison.

Bailey, E. R.

Goff, I. N.

Miller, E. S.

Monroe.

Angell, E. B.

Greene, George W.

Ozman, I. D.

Ballentine, E. N.

Greenleaf, C, A.

Pennington, A. C.

Boswell, C.

Hemus, A. A.

Potter, M. C.

Berkman, J. S.

Ingersoll, J.

Ruggles, Elwood

Brown, A. H.

Jones, W. B.

Sullivan, J. H.

Brown, W. M.

Leary, M. E.

Thomas, S. W.

Comfort, C. B.

Murphy, P.

Van der Beek, C. A.

Cochane, William B.

Boddy, Edmund C.

Weaver, J. E.

Conklin, Wm. S.

Mooney, Thomas T.

White, George F.

Elsner, S. L.

Nugent, E. G.

Wallace, W. T.

Ontario.

Allen, D. S.

Baright G. E.

Beahan, A. L.

Howe, Wm. A.

Merritt, C. P.

Spalding, F. W.

Orleans.

Starer, F. B.

Onondaga.

Baum, Henry C.	Johnson, J. R.	Rutland, A. S.
Brood G. B.	Jacobson, N.	Rood, A. B.
Belknap, E. W.	Kellogg, W. C.	Randall, A. B.
Babcock, A. B.	Leary, J. H.	Russell, W. G.
Blumenthal, C. A.	Loveland, B. C.	Snow, S. F.
Cullings, M. H.	Lewis, G. G.	Stephenson, F. H.
Craton, S. B.	Miller, A. B.	Sears, J. W.
Didama, H. D.	Mooney, E. L.	Slocum, F. W.
Elsner, H. L.	Mercer, A. C.	Totman, D. M.
Easton, F. E.	Marlow, W.	Vadeboncoeur, A. F.
Flaherty, J. H.	McClary, C. E.	Van de Warker, Ely
Felton, C. A.	Munson, W. W.	Vedder, A. M.
McLennan, R. C.	Mercer, A.	Wright, H. B.
Halsted, T. H.	McMorrow, F.	Wiggins, H.
Hawley, H. B.	Pearson, R. H.	Wynkoop, E. J.
Heffron, J. L.	Price, G. M.	

Oswego.

Cooley, R. N.	Crockett, R. S.	Doane, H. M.
Dowd, P. M.	Rainier, E.	Todd, William C.
Wells, W. M.	Wilcox, H. P.	

Schuyler.

Bernett, M. S.

Seneca.

Everets, D. F.	Madden, J. E.	Onan, R. E.
Purdy, J. S.	Russell, William.	

Syracuse.

Ayling, W. J.

Wayne.

Arnold, J. N.	Brownell, M. A.	Carmer, M. E.
Carr, R. S.	Lapp, E. H.	Myers, J. F.
Smith, L. H.	Young, A. A.	

Wyoming.

Palmer, George W.

Yates.

Doubleday, C. E.

THE PRESIDENT.—The program is now in the hands of the business committee.

Dr. SEARS.—Before we proceed with the addresses, I would like to ask permission to invite Dr. Isabel McMillen, of Oswego, to take part in the exercises of the day, if there is no objection. It was so ordered.

Papers were then read as follows :

Nervous dyspepsia, by B. C. Loveland, Syracuse.

A plea for the more frequent use of mydriatics in so-called ophthalmias, by Lucien Howe, Buffalo.

On the resuscitation of the newborn by Laborde's method, by Francis E. Fronczak, Buffalo.

Treatment of epilepsy in its incipient stages, by Wm. P. Spratling, Sonyea. Report of two cases of sub-acute myelitis, by Edward B. Angell, Rochester.

THE PRESIDENT.—I wish to invite the members of the Central New York Medical Association to go to the Medical College, immediately after luncheon, where Dr. Clark, the professor of physiology, has kindly consented to show the circulation in the beef-heart in active operation; it will be a very interesting sight, no doubt. The afternoon session will begin promptly at 2 o'clock.

All delegates who are eligible to permanent membership will please come to the secretary and enroll their names immediately at the beginning of the afternoon session.

Afternoon session convened at 2.30 p. m.

THE PRESIDENT.—There is one case which is not down on the program. Dr. Stebbins, of Onondaga, has a patient in the side-room which he will tell you about now and which those of you who care to, can step out and examine.

Dr. STEBBINS.—The patient which I have here in the ante-room has suffered from cataract. The young man is 33 years of age and he has been operated upon for a cataract. His complications are a detachment of the retina and nystagmus. The young man came to me last March and had a cataract, which I removed. I did not perform the modified linear extraction, but removed the lens entire. The patient had a great deal of pain, but no redness or inflammation, and he is now in the ante-room and you can see him. You will find a very good looking eye, and he has now, with glasses, 20-70 vision.

The secretary read two letters which had been received by him with the request that they be read at the meeting of this Association,

one dated Detroit, October 7, 1899, and the other Savannah, Georgia, June 6, 1899.

Dr. GERIN.—I move that we adopt the sentiment or resolution, if you please, as it is embodied there, and that we instruct our secretary to communicate with the American Medical Association, setting forth our urgent request for the promotion of the Surgeon-General to the rank of Major-General. I think myself that is the proper place for him to be. He should be where he won't have to take orders from every boy that ranks him, because he has the star of Brigadier-General. I think frequently the members of our profession do not obtain the rank in the army or in the navy or in the militia which their service and intelligence and education entitle them to.

Seconded by Dr. Arnold and carried.

Dr. MOONEY.—The first paper which was read with regard to state medical education, what will be done with that? Dr. Krauss, what have you to say about that?

Dr. KRAUSS.—I heard part of it and I read the letter over while seated with the secretary; I think it would be a good plan for the society to adopt the idea mentioned in the paper. I make a motion to that effect, that we subscribe to the statements and place our society in line with the ideas brought forth in that letter.

Seconded by Dr. Gerin and carried.

Treasurer's report, by Dr. S. L. ELSNER.

ROCHESTER, N. Y., October, 1899.

1898.		Dr.
October	18. Cash on hand at last report	\$115.02
"	18. Collected dues at Auburn, 1898	110.00
"	18. Collected fees " "	26.00
December	1. Collected from Dr. Woodruff	1.00
1899.		
March	10. Check returned from printer, A. T. Brown . .	7.00
		\$259.02

1898.		Cr.
October	18. Janitor and help	\$ 1.00
"	18. Wm. C. Krauss, postage, etc	5.50
November	9. Miss Knapp, stenographer	24.52
"	9. Bills to post express	20.25
"	9. John C. Moore, book-binding	2.00
"	9. Secretary's salary to October, 1898	10.00

1899.			CR.
January	23.	Exchange on check	\$.15
"	23.	Postage and stationery	1.00
March	8.	A. T. Brown, Higgins' plate	7.00
July	4.	A. T. Brown, printing	2.85
"	30.	A. T. Brown, Transactions	65.00
Sept.	9.	C. A. Vander Beek, postage, envelopes, printing, etc	45.00
Total expenses			\$184.27
Cash to balance on hand			74.75
			\$259.02

Dr. GERIN.—I move that the report be accepted. Seconded by Dr. Angell and carried.

The election of officers was the next order of business and resulted as follows: President, John Gerin, Auburn; first vice-president, Dr. Lucien Howe, Buffalo; second vice-president, A. L. Beahan, Canandaigua; secretary, C. A. Van der Beek, Rochester; treasurer, S. L. Elsner, Rochester.

Dr. REYNOLDS, of the committee on membership, reported that the following physicians had complied with the requirements of the Association and were eligible to membership: S. E. Austin, Cayuga; F. E. Fronczak, Erie; W. D. Johnson, Genesee; E. C. Boddy, W. T. Wallace, C. V. C. Comfort, C. O. Boswell, Monroe; G. B. Broad, F. E. Easton, A. B. Babcock, O. A. Blumenthal, S. B. Craton, T. H. Halsted, Onondaga; F. W. Spaulding, C. P. W. Merritt, Ontario; E. Ranier, Oswego; W. L. Russell, Seneca; M. L. Bennett, Schuyler; R. S. Carr, E. H. Lapp, J. F. Myers, Wayne.

Dr. ANGELL.—I move the names as read be admitted to membership.

Seconded by Dr. Arnold and carried.

Dr. SEARS, of the business committee: Owing to the lateness of the hour, it seems wise to the business committee to limit the papers to ten minutes and the discussions to five, for the reason we have a large number of papers to get through with and the time is limited. It is also requested that each one who reads a paper will leave a copy with the secretary.

Presentation of patient sixteen months after modified Kraske's operation for extirpation of rectum, by S. L. Elsner, Rochester.

Personal experience with fracture of the hip, by G. W. Green, Auburn.

The missile and the weapon, by A. L. Hall, Fair Haven.

Uterine hemorrhage, by A. L. Beahan, Canandaigua.

The clinical thermometer as a germ carrier, by W. L. Conklin, Rochester.

Traumatic nephritis, by J. P. Creveling, Auburn.

A case of carcinoma of the prostate gland, associated with stone in the bladder, by Nathan Jacobson, Syracuse.

Cephalagia and tic douloureux from accessory sinus affections, by Sargent F. Snow, Syracuse.

My experience with formalin, by Ely Van de Warker, Syracuse.

Dr. GERIN.—Last year I gave notice to move an amendment at this meeting, changing Article I. of the Constitution. The article now reads that this organisation shall be called "The Medical Association of Central New York." I gave notice to amend it to read, "The Medical Association of Central and Western New York," or, "Central-Western New York." I believe that has been suggested today as meeting the approval of some. If the Association is prepared for the amendment, I will move its adoption.

Seconded by Dr. Van de Warker.

Dr. VAN DER BEEK.—I would say that at the last meeting the President, Dr. Krauss, made certain recommendations and appointed a committee to consider them.

After some discussion, Dr. L. A. Weigel said: It seems to be the general impression that the committee is still in existence. The committee appointed on the president's address has made its report and I presume its labors are ended. If any amendments are to be acted upon, it will be necessary to appoint a new committee for that purpose. There is no committee now.

Dr. GERIN.—I move that a new committee be appointed.

Seconded by Dr. Van der Beek and carried.

The president appointed as such committee: Dr. Jacobson, as chairman; Dr. Angell, of Rochester, and Dr. Krauss, of Buffalo.

The following papers were then read by titles:

Taking inventory of a nervous case, by Wm. C. Krauss, Buffalo.

Erysipelas, by A. A. Young, Newark.

Cystitis, by C. C. Thayer, Clifton Springs.

Some of the causes and effects of mouth-breathing, by J. M. Ingersoll, of Rochester.

Report of pyloric and cardial tumor, cured by jejunostomy and physiologic rest of stomach, by A. L. Benedict, Buffalo.

The treatment of pulmonary tuberculosis, by Parker Murphy, Rochester.

Rare case; exhibition of specimen and result of operation, by J. Henry Dowd, Buffalo.

Dr. GERIN.—I would like to move a vote of thanks to the retiring president for the very able and courteous manner in which he has presided at this meeting.

Dr. MURPHY.—I would amend that motion by including our very able secretary, who has done so much valuable work. Seconded by Dr. Sears and carried.

Dr. ANGELL.—I move that the Society extend a vote of thanks to the Onondaga Medical Society for the very generous way in which they have entertained the Association today.

Seconded by Dr. Gerin. Carried.

The meeting then adjourned to meet the third Tuesday in October, 1900, at Rochester, N. Y.

BUFFALO ACADEMY OF MEDICINE.

Obstetrical Section, Tuesday Evening, September 26, 1899.

REPORTED BY ALBERT J. COLTON, M. D., Secretary.

THE chairman, Dr. H. D. INGRAHAM, called the section to order at the regular hour of meeting. The minutes of the last regular session were read and approved, and the report of cases was taken up at once.

Dr. M. D. MANN presented specimens and reports of two cases :

Case I.—A large uterine fibroid, in which the cavity of the uterus was below the tumor. On cutting open the canal, a well developed ovum of about six weeks gestation was discovered. The fibrous growth was very large, and growing rapidly, and this Dr. Mann ascribed to the pregnancy.

Case II.—That of a woman who was perfectly well, until three or four days ago, when she was suddenly seized with excruciating pain in the side, chills and pronounced shock. On examination, a tumor was found, evidently connecting with the ovary, and an opinion given that the symptoms were due to a twisting of its pedicle. At operation, a solid growth was found, which was connected with the

ovary, and having a pedicle that was twisted three times. Doctor Mann said that he had never seen but one other solid tumor where there was a torsion of the pedicle, and that was a uterine fibroid.

Dr. MANN also read a letter from Dr. Coromilas, of Athens, Greece, the writer wishing to bring before the American medical profession, the fact that he was the originator of mechanical dilatation of the cervix and vulva during labor. Dr. C. also kindly sent his picture.

Dr. THOMAS F. DWYER made a motion, which was seconded and carried, that the letter be received and filed.

PAPERS.

The relation of gastric disturbances to gynecologic disease, by A. L. Benedict.

The author claimed that most of the inflammation and conditions in and around the uterus, ovaries, and the like, were accompanied by stomach symptoms, such as nausea, vomiting and pain. He cited several cases to prove these assertions.

The second paper was entitled Anesthesia, by F. W. McGuire, see page 325.

DISCUSSION.

Dr. DUNHAM complimented Dr. McGuire on his very able paper. He suggested that the room be quiet, when an anesthetic was being given, as the presence of talking friends kept the patient nervous. He also suggested that surgeons pay anesthetists larger fees and thus obtain good men.

Dr. T. F. DWYER said he had read in a journal, some time ago, that the inhalation of vinegar, after an anesthetic, would prevent nausea, etc., and asked if the essayist had had experience with the same.

Dr. GROSVENOR remarked that in England very little ether is used.

Dr. MANN said some of Dr. Benedict's cases do not illustrate the title of his paper very well. There is in some cases a close relation to the stomach and adnexa; but in the majority it is due to displacement. He cited several instances. In regard to anesthesia, he said he always used ether because it was the safer, but also said he had had five cases of death due to suppression of urine, Bright's disease being present in these cases. He suggested that we follow England, and have one experienced man in hospitals, whose duty it would be to anesthetise all patients for operation.

Dr. MILLENER suggested that in children, who are as a usual thing very much frightened, the anaesthetiser attract the attention of the patient by diverting the mind from the anaesthetic.

Dr. HARTWIG agreed entirely with Dr. McGuire, but added that he usually told patients what sensations they might expect, so that when they occurred, they would know it was a part of the procedure. He disagreed with Dr. Millener and said further it is absolutely impossible to distract the thoughts of children when taking chloroform, as they are almost frightened to death. On the other hand, he usually follows Dr. Miner's advice, "when anaesthetising children, push it as fast as you can."

Dr. CONGDON said that Dr. Benedict did not cite cases as clear as he should, and as to leucocytosis remarked that Dr. Krauss, who has just returned from Europe, quotes the Germans as saying that leucocytosis as a test for pus is of no more value than the urinary test for typhoid, and that any drain on the system will give the same results.

Dr. BENEDICT, in closing, said that he was aware that displacements of the uterus caused stomach symptoms more often than other surrounding troubles.

Dr. MCGUIRE, in closing the discussion on his paper, said in reference to Dr. Millener's remarks, that in all the cases where he had given anaesthetics to children, he had never known one to go to sleep without great struggle and outcry. He had no experience with vinegar and is guided by the rigidity of the eye-ball as to giving air or chloroform.

Section on Medicine, October 10, 1899.

REPORTED BY J. C. CLEMESHA, Secretary.

THE Medical Section of the Academy of Medicine held the first regular meeting in the Academy Parlors, Market Arcade, October 10, 1899. Meeting called to order 8.30 p. m. Dr. ELI H. LONG in the chair.

The minutes of the previous meeting were read and approved.

Dr. IRVING P. LYON read an exhaustive and interesting paper on Malaria, dwelling largely on the rôle of the mosquito in the evolution of the malarial parasite and upon the labors and writing of Manson, Ross and Italian investigators in that direction.

Dr. C. G. STOCKTON, in opening the discussion spoke on the question of change of type of fever from tertian or estivoautumnal to quartan or intermittent, and said the mosquito-malarial theory could account for such cases. He also brought up the question of the transmission of the malarial germ by the mosquito to its progeny and of the possibility of there being some other host than man, mentioning the ripeness of malaria in sparsely habited regions.

Dr. H. R. HOPKINS wished to know the origin in nature and the locality, primarily, of the parasite of which the mosquito is the carrier.

Dr. JACK, of Depew, questioned the theory and referred to the action of certain ground gases upon the blood, causing alteration and disintegration of its elements.

Dr. JEWETT stated that each year, for several years, he had seen cases of malaria in Buffalo, which with a few exceptions had been in the neighborhood of the Hamburg Canal.

Dr. A. A. JONES wished to know if the species anopheles existed in Buffalo and spoke of the transmission of other diseases by the common house-fly.

Dr. H. U. WILLIAMS paid a tribute to the various investigators and spoke of the difficulty, the patience and pains necessary for the technique of these experiments.

Dr. Lyon replied.

The meeting adjourned at 10.45 p. m. Members present, 51.

Section on Pathology, Tuesday, October 17, 1899.

REPORTED BY FREDERIC H. MILLENER, M. D., Secretary.

THE second regular meeting of the section on pathology for the season was held on Tuesday, October 17, 1899.

The meeting was called to order by the chairman, Dr. A. G. BENNETT, at 8.50 p. m. Thirty-three Fellows were present.

Minutes of the preceding meeting were read and approved.

The subjects for the evening were A case of poli-encephalomyelitis in an adult, presenting the clinical picture of Landry's paralysis and terminating fatally in thirty-eight hours after the appearance of the first definite symptoms of motor disturbances in the legs, by Dr. DEWITT C. SHERMAN; and Chronic rhinitis and its relation to ocular affections, by Dr. EDMUND A. BLAAUW.

Dr. SHERMAN's patient was a medical student, aged 21, with clear personal and family history. One week before taken ill he received a

dissecting wound, which was thoroughly cauterised and healed promptly. On Monday evening he called upon Dr. Sherman complaining of malaise and headache, thought to be due to constipation. Laxatives were administered. Next day nausea was present and lasted until Wednesday night. Wednesday afternoon the first definite symptoms of motor disturbances appeared in the legs. On Thursday, at 4 a. m., difficult respiration commenced, five hours later patient was compelled to assist respiration by pulling on iron bedstead with his arms. This gives us a picture of paralysis commencing in the feet, except the toes, and advancing rapidly up the body, so as to interfere with respiratory movements in about fourteen hours. He retained use of his arms until Thursday afternoon, when they became paralyzed. At 5 p. m. deglutition became difficult and at six he was unable to swallow. During that afternoon sensation was not even delayed. Electrical reactions were intact. All reflexes from shoulders down were lost. The intellect was clear. As artificial respiration was fast using up his strength, tracheotomy was performed in the evening at eight, in order to use an artificial respiration apparatus. Next morning at 1.40 he died. Gross post mortem signs were negative. The only microorganism found from collection of blood in all organs of the body was one similar to the bacillus coli communis. The pathological findings of the spinal cord and brain show an inflammatory process of the anterior cornu of cord and parts of brain with a well marked round-celled infiltration.

Dr. Sherman stated that the post mortem and bacteriological study was made by Dr. Herbert U. Williams. The historical pathology of the case, with remarks, was very comprehensively reported by Dr. William G. Spiller, of Philadelphia. The paper was then discussed by Drs. Putnam, Hartwig, Rochester and Long.

Dr. PUTNAM stated that it was the best presented case of its kind that he had ever had an opportunity of listening to, also, as Dr. Sherman stated, that the majority of the staff of the General Hospital were inclined to believe it hysteria, Dr. Cary being an exception, he declaring it to be Landry's paralysis. Dr. Putnam stated that he did not make a diagnosis. He also stated that a great many cases diagnosticated as Landry's paralysis were simply cases of multiple neuritis.

In connection with the case of Dr. Sherman, he reported a case at the General Hospital, which he had seen in consultation. This case differed from Dr. Sherman's in that there was gradual ascend-

ing paralysis, with loss of sensation and loss of control of bladder and bowels. The patient had almost total loss of faradic contractility. This was a case of affected ascending myelitis, and differs from Dr. Sherman's case in the fact that the sensory tracts of the cord were involved. The case ended fatally on the seventh day. He believed that this case was also the result of infection of the cord.

In closing, Dr. Sherman answered several questions which had been asked.

The next paper was that of Dr. BLAAUW. After a dissertation on the condition present in chronic rhinitis, the speaker mentioned the three ways in which the visible parts of the eye might be influenced.

(1) Through the secretion; (2) through the extension of the pathological process proper, the mucous membrane; (3) the indirect way.

1. The speaker pointed out a connection with eczema of the eyelids and what was called scrofulus ophthalmia, also the possibility of erysipelatous infection.

2. Hypertrophy extending in the nasal lachrymal duct, giving rise to stenosis with closure of the duct and the consequences. The speaker pointed out the importance of the enlargement of the anterior middle conchi. He also found same complaint in the hypertrophic stenosis of the duct as in unhealed chronic rhinitis. The results of treatment making the duct permeable is very satisfactory. The speaker developed his practice of not using large probes. He also mentioned Dr. Bettremieuz who found beneficial results in making the tear passages normal in tic douloureux. The principal point here is the headache. Too often the nose is overlooked in this relation. In closing Dr. Blaauw pointed out the necessity of the ophthalmologist being also a rhinologist.

The paper was discussed by Dr. Hinkel, Dr. Rochester, Dr. Cott and Dr. Bennett.

Dr. HINKEL stated that many of the varieties of hemicrania have origin in the nose, due to pressure symptoms, usually spur-like enlargements of the septum.

Dr. COTT stated that he did not believe disease of the duct was due to rhinitis as often as supposed.

Dr. BENNETT spoke of several cases in his practice in which phlyctenular conjunctivitis was caused by adenoid growth in the vault of the pharynx. In removing this condition the general health improved and so also the conjunctivitis.

Progress in Medical Science.

OPHTHALMOLOGY.

CONDUCTED BY ALVIN A. HUBBELL, M. D., Buffalo, N. Y.

Clinical professor of ophthalmology in the University of Buffalo.

THE EYE AFFECTED BY PATHOLOGICAL CONDITIONS OF THE TEETH. LAGLEYZE (*Archives D'Ophthalmologie*, March, 1899; *Brooklyn Med. Journal*, September, 1899) claims that the following ocular affections may sometimes be of dental origin: Epiphora, blepharitis, conjunctivitis, keratitis, glaucoma, spasm of accommodation, mydriasis, blepharospasm, strabismus, neuralgia, photophobia and amblyopia. Caries or periostitis of upper molars is not an infrequent cause of a diseased condition of the eye. Hypersecretion of the lachrymal gland is often of reflex origin, the dental irritation being communicated by filament of the orbital branch of the superior maxillary division of the trigeminus.

Many cases have been published which show the possibility of glaucoma being a reflex affection. Mention is made of a case in Abadie's clinic; sclerotomy had been done twice without any beneficial results. However, upon the extraction of a diseased tooth, the intraocular tension was quickly relieved. Paralysis or paresis of accommodation may be caused by odontalgia. It is a common observation that dental neuralgias cause a hyperesthetic condition of the eye. Galezowski says that monocular mydriasis, eight times out of ten, is due to dental affections. However, Lagleyze regards this statement as an exaggeration. Redard, Mitchell and others cite cases of strabismus occurring in infants during the period of dentition.

Vasomotor paralysis, especially in children, causes a congestion of the conjunctiva and lessens its resisting power, and, as a result, the eye is more susceptible to the action of microorganisms. Power reports a case of ulcer of the cornea and anesthesia of the parts supplied by the ophthalmic branch. After extraction of diseased teeth the corneal trouble was much improved and the anesthesia entirely disappeared. Abadie is of the opinion that stricture of the lachrymal duct is very frequently caused by a periostitis extending slowly up the superior maxilla. It is considered advisable to carefully examine the teeth in all ocular diseases which are of doubtful etiology and which do not readily yield to the ordinary methods of treatment.

COMPLICATIONS FOLLOWING THE ENUCLEATION OF THE EYEBALL.

IN THE last Annual Report, 1898, of the *Transactions of the Ophthalmological Society of the United Kingdom* (*Brooklyn Med. Journal*, September, 1899,) an exceedingly interesting report was submitted by a committee appointed to consider the relative value of simple excision of the eyeball and the operations which have been substituted therefore. One of the questions considered was the frequency of meningitis after excision. Reports from a number of large hospitals show that out of nearly 11,000 excisions there were only 7 cases of meningitis. The committee regarded it as highly probable that in a certain proportion of the cases in which the patients have died from meningitis after excision of a suppurating eye, the meningitis began before the operation, and that the patients would have died had no operation been performed. Among some of the advantages of Mule's operation may be mentioned that in quite a number of cases there was excessive reaction, sloughing of the sclerotic and subsequent pain and irritation in the stump.

 ILLEGAL MEDICINE.

Conducted by NELSON W. WILSON, M. D., Buffalo, N. Y.

TWO DEATHS FROM "CHRISTIAN SCIENCE."

DURING the past month there have been two cases of christian science which by reason of the vicious cruelty under which the patients died are of particular public interest.

Since the publication of the first matter in this department last month, I have received a letter from a physician in Buffalo, whose judgment is uniformly excellent. He commends the JOURNAL for its firm stand in all matters which are against the public good, but suggests that "too much publicity" can be given to the subject of christian science. As a general proposition in matters of dispute "too much prominence in print serves to advertise an opponent," as the correspondent says, but in the case of christian science "too much" prominence cannot be given this unholy sect. Their acts, their beliefs, their prayers, their teachings and their victims cannot be given "too much" prominence. Christian scientists are not opponents. They are evils; public evils, and as much of a menace to public health as an epidemic of the plague. They are the latter-day types of the medieval witch-doctors; they are the editions *de luxe* of the snake-skinning voodoos and charm-chanting medical men of benighted heathen nations. Repeated efforts to check their

practices by legal methods have failed; not because there are not laws covering their acts, but because, unfortunately, money has been used and the influence of those in high places has been thrown into the balance at critical moments, and politics appealed to. This statement applies particularly to New York State. In Kentucky, the land of the "bloody ground," fakirs in medicine are not tolerated; but in the Empire State where a beneficent legislature says that a certain fistic artist must not punch another fistic artist in the nose outside of a regularly licensed and incorporated athletic club, and that even then he must not do his punching unless his fists are properly gloved, efforts to correct an evil which permits a pain-rocked soul to "pass on" to kingdom come without so much as a good-bye, to say nothing of an absolute lack of the slightest attempt to lessen the death agony, are met by a fierce appeal to religious rights, and politicians, angling always for class vote, side in with the scientists and either pigeonhole or destroy corrective measures.

This is made possible by the fact that christian scientists, whatever else we may say of them, are clannish. Let one christian scientist fall into the clutches of the law, and the whole body gather together ready, willing and anxious to put up money for defense. Class differences for the time being buried and all put their shoulders to the wheel and work—not for their fellow-fakir who is in the toils, but for their cause. They show the highest type of fanaticism. One of the scandals of the christian science outfit in Buffalo was said to be the quarrel between "Rev." "Dr." Hardy and one of the women followers of Mrs. Eddy's double-cross. This quarrel, so public report says, was over the instructing of young healers, and resulted in a split. When the Kinters were arrested for their connection with the Saunders case, "Rev." "Dr." Hardy and the woman in question were found side by side in the council chamber before the board of aldermen's committee on ordinances, fighting for a common cause. That is one secret of their apparent strength. The same reason accounts for the temporary strength of the followers of the Mahdi's green flag of fanaticism. The history of all fanatics is the same. The cohesive power of unity makes them strong at the outset, but their fate is the same in the end. It may be that which befell the ghost dancing Indians of our own west; it may be that which overtook the hordes of cut-throats which fell before Lord Kitchener's onslaught, and it may be the less gory, but none the less effective which will overtake the christian scientists of today, but it will be the same in effect—a crushing of a great evil.

CHRISTIAN SCIENCE AND VACCINATION.

MAYOR HIXON and the city council of Americus, Georgia, has been wrestling with christian science and have set an example which is worthy and might be followed with great benefit to the public at large by more pretentious cities.

Smallpox is epidemic in Americus, and the council passed an ordinance requiring every person to submit to vaccination. The city physician began the work. The christian scientists rebelled, declaring their faith was sufficient proof against the disease, and that they were not subject to the ills of ordinary mortals.

There was no arguing over the matter; no long-winded hearings before committees as in Buffalo. The city authorities promptly placed the scientists under arrest. Mayor Hixon assessed fines against them ranging from \$3 to \$30 and solitary imprisonment from ten to thirty days each. Five of the most prominent ladies of the city were sentenced to ten days' imprisonment and fined \$3 each, the Mayor leaving it with the chief of police to select the place of confinement. They may be quarantined at their homes. A leading merchant was sentenced to thirty days in the city jail and to pay a fine of \$30.

Many other scientists will be tried and like sentences will be imposed. All are technically charged with disorderly conduct. They have employed counsel and will take the cases to the highest court. The christian scientists declare that their religious freedom is being infringed upon and that the city has no power to vaccinate them. They say they will go to jail and rot before they will submit to the virus.

From the way Mayor Hixon has started in, it is safe to say scientists of Americus, Ga., will be vaccinated.

Selection.

THE FAITH HEALER'S IDOLATRY.

[American Medical Quarterly, September.]

THE somewhat startling proportions into which the various forms of belief in the efficacy of prayer to heal disease has grown, justifies a full and unimpassioned discussion of the subject in the medical journals and magazines. While the healer confined his work

to those persons who had reached the age of discretion and limited their pretended ministrations to diseases of benignity, or to affections of the imagination, no great harm could result. But, emboldened by the pretense of success on the one hand, and by the indifference of the general public on the other, he is stimulated to invade fields that make him a dangerous member of the body politic, if not a downright outlaw.

He denies the contagiousness of disease, sends infected children to the public schools, and spreads contagion with a recklessness that brings dismay to the intelligent and thoughtful citizen. He says diphtheria is not fraught with danger because it is not susceptible of transmission from person to person; he treats scarlet fever in the same manner that he would a stone bruise, and even denies that there is such a malady as smallpox. An epidemic of cholera would be a camp-meeting revel and the bubonic plague a carnival of faith-curing glory, in which he would display the wonderful healing powers of his divine gift. A touch, a blessing or an invocation, and lo! they vanish into thin air, into the realms of immunity, where disease is unknown and where suffering cannot enter!

Nay, more; cancer, consumption, syphilis and gonorrhea cannot exist, because there is neither disease, curable or incurable, nor contagion, infection or heredity.

But the faith healer does not stop at disease: he offers his ministrations at childbirth and would pray in the midst of the alarming flooding of placenta previa or post-partum hemorrhage with the same assurance and confidence of success that the prestidigitateur boils eggs in a new silk hat, borrowed from an auditor, to whom he promises it back unsullied, or exhibits the vanishing lady to a surprised assembly. A ruptured uterus, puerperal eclampsia, and a two and a half inch conjugate hath no terrors for him, while asphyxia and ophthalmia neonatorum are purely fictions of an unbelieving imagination.

Our progressive and aggressive "healer" even would invade the domain of surgery and undertake the care of a broken leg or a wound of the intestines, praying the fragments into aposition, or the several tissues into continuity. But we need not call attention further to the absurdities, inconsistencies or impossibilities which this strange sect would practise. At first glance these claims may seem apocryphal to the reader. We beg to assure the incredulous that they are not exaggerated. We have heard some or all of these claims made, in reality or impliedly, in a public audience chamber.

During the past few months the daily newspapers have contained many accounts of the workings of these singular people, and the victims of their practices are becoming so numerous as to make the record positively startling. Especially is this the case among children or young persons below the age of responsibility. Misguided parents have assumed to deny them the aid of lawful medical attendants, and they have been allowed to die neglected and, in many instances, in the agony of suffering. All this, too, in the closing year of the XIXth. Century, admittedly the most enlightened period of the world.

The dangers to the public weal from the unrestricted practice of these methods, and the propagation of these dogmas of faith cure are apparent, and sooner or later must arouse an indignation that will be as swift in judgment by contrast as it has been slow to anger.

Meanwhile the difficulties in correcting the evils are many, and are not easily overcome. Prosecuting attorneys are often tainted with the belief or have been told that some of their constituents have been cured through the ministrations of the accused "after the doctors had given up" the patient. Grand jurors, too, arise in their places, pending the consideration of a proposed indictment, and tell of the wonderful cures that have been performed within their own knowledge by the prisoner. Lawyers, also, of greater or less distinction, can always be found to espouse the cause of a healer in the toils, and cunningly distort the facts to prove that these people do not practice medicine because they prescribe no drugs.

There is another great danger that threatens the miscarriage of justice in these cases. Judges are likely to be chosen from among these same lawyers, hence the bench may become a propagandist of this monstrous faith.

In a former issue the *Quarterly* took the ground that the existing statutes are all sufficient to meet the demands of justice in these cases. We still think so; but it, nevertheless, remains for the public to become well informed as to the dangers that lurk in the midst of indifference, and to demand an obedience to the laws that relate to the practice of medicine in the several states. They are framed in the interests of the people for their protection against ignorance and deception. Let them be obeyed !

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges should be addressed to the editor: 284 FRANKLIN STREET, BUFFALO, N. Y.

VOL. XXXIX.—LV. DECEMBER, 1899.

No. 5.

UNITS OF REMEDIAL AGENCIES.

IN ALL physical sciences the foundation is considered to be laid when the standard units have been established. In pure chemistry that includes the determination of specific gravities, atomic weights and valences, it is recognised that these are essential prerequisites to all further study. Yet physiological sciences, the materia medica and therapeutics, have long been content to continue without any such definite fixation of the units. It was only ten years ago that the United States Pharmacopeia recognised the principle of standardisation when it admitted its application to opium, nux vomica and cinchona.

Certain drugs are easily reducible to such standardisation by chemical analysis of their constituent elements. The principle already recognised in the case of the three drugs, whose standardisation has been officially sanctioned in the present pharmacopeia, may readily be extended to others in the forthcoming revision. There is every reason to expect that the committee on revision will sanction the standardisation of calabar, hyoscyamus, colchicum, ipecac, veratrum, belladonna, gelsemium, podophyllum, conium and stramonium which are placed in the same category as opium and nux vomica by reason of their toxicity and their importance. No difficulty will be encountered in the extension of standardisation to such galenicals as may be tested by chemical assay, and the quantitative determination of their active constituents.

Yet there are other drugs of equal importance and of the same or even greater degree of toxic power which should be brought to a working standard just as much as those already mentioned. In the

case of these, the ordinary methods of chemical assay are found to be inapplicable. Yet not on that account is their standardisation to be held impracticable. At least one of the great manufacturing establishments, which has devoted great attention to the quality of its pharmaceutical preparations, has carried the standardisation of these articles beyond the mere process of experiment and has reached successful results. In this method the test is physiological. The symptomatic effects of the drugs is comparatively illustrated on small animals, the frog having been found in practice the most readily available. The method of this physiological assay is remarkably simple, yet none the less effective. Frogs are treated with the drug of a certain recognised standard of potency, the object being to establish for the group of animals which they represent the minimum fatal dose. Upon other animals of the group the drug to be tested is tried experimentally for a similar determination of the minimum fatal dose. The ratio between the two doses thus ascertained will afford the percentage of the strength of the drug under test as compared with the standard. It has been the practice of the house which has made the greatest strides in the direction of this physiological assay to reject all the drugs which are found below the standard, a policy which we learn has been responsible for the rejection of many tons of crude drugs every year.

The revisers of the pharmacopeia need have no fear of the physiological assay as either a new or an unaccepted practice. It has been established in the case of several remedial agents with unflinching success, and the principle has been abundantly passed on in the case of antidiphtheritic serum. All that is asked of the revision committee is that they accept an accomplished fact and, by the weight of their approval sanction, make official a condition already in successful existence.

We have refrained from presenting more than the principle involved, for we are of opinion that the establishment of the principle as official is the best thing for modern medicine in the revised pharmacopeia. Yet the vital importance of the subject is to be seen in the most cursory examination of the drugs which will first be standardised under this process. These are *cannabis indica*, *digitalis*, *aconite*, *ergot*, and *strophanthus*. Just how important this standardisation is in the case of these drugs unamenable to chemical assay is exhibited in the case of *strophanthus*. Its active principle, *strophanthin*, is three times as poisonous as *atropin*, ten times as poisonous as *strychnin*, and twelve times as poisonous as absolute hydrocyanic

acid. This shows the danger in using such a drug when the toxic qualities are not officially determined, and that danger constitutes in itself the best argument for the sanctioning of the physiological test, since in the case of the glucosides that is the only test which is available.

BENNETT PARK AND THE NEW EMERGENCY HOSPITAL.

AN EX-COUNCILMAN of the City of Buffalo, an old-time resident, and a man who by reason of his business associations one would naturally suppose to be broad-minded and liberal in the view he takes of public matters, has written a communication to the Board of Park Commissioners protesting against the use of public parks as breathing spots for convalescents from a projected hospital.

This gentleman is Mathias Strauss, a sheepskin tanner, a kindly-faced man, whose career in the board of councilmen was not marked by any particularly narrow-minded act; in fact, he finished out his term, as it was expected he would, as an inoffensive representative of the business interests of Buffalo, and this remarkable communication which has brought him into prominence, is really the first thing he has ever done, so far as the JOURNAL knows, which is in the slightest degree illiberal or narrow-minded.

In his communication, Mr. Strauss called the attention of the Park Commissioners to the fact that the Sisters of Charity were to build a new emergency hospital adjacent to Bennett Park, to replace the present hospital building, and he very seriously asked the commissioners to take action now to prevent the patients of this institution from frequenting the park. He said the park was now frequented by old people and children and it was undesirable to have the sick and maimed thrust before them while they were taking recreation.

This remarkable communication created considerable discussion among the members of the Park Board, who are somewhat divided on the subject. The majority of the board, the JOURNAL is glad to be able to say is made up of progressive men, who are not in any way narrow-minded or bigoted. They believe if the fresh air of the park system is for all persons of whatever condition, and that Mr. Strauss's objection is not a good one, because if any of the inmates of the hospital did occupy the park at any time, they would be convalescents who would be benefited by the air and exercise, and be not at all objectionable to other frequenters.

Yet, it strikes the JOURNAL that Mr. Strauss has arisen before the bell has rung, inasmuch as he has entered a protest against something which is not likely to happen. Ground has not yet been broken for the hospital.

As a public-spirited citizen, and a man who is disinterestedly battling for the comfort of the public at large, the JOURNAL would suggest to Mr. Strauss, that he investigate and report on the stink of tanneries and skin warehouses—stinks which are distinctly offensive and injurious to the health of neighborhoods.

The stand taken by Mr. Strauss in this matter created considerable comment and the latter wrote the following letter to an afternoon newspaper, which the JOURNAL publishes, merely as an exhibit :

I herewith wish to state and prove that Mathias Strauss is not against poor or crippled people, as stated in all the Buffalo newspapers, which I will prove at once : First, I am a member of all the Catholic institutions in this city. No man of Buffalo visits them more or helps them more when in need than M. Strauss. I am a friend of the Sisters of Charity, and have been ever since they were established in Buffalo. My whole family and myself belong to their beneficiary society, and I generally visit this institute every other week. To show that I am home with the sisters, I furnished one of the best rooms in the new wing and my sons furnished another smaller one. Within the last four weeks I have ordered two memorial painted windows for their chapel. All this will prove that I am a friend of that institute. The reason I oppose is that I know the financial standing of the Sisters. I know that they own a place on South Division and Michigan streets. If they must build, why not build where they are now? The main object is, this little park is overcrowded on nice summer nights, especially when there is a concert; more than 10,000 are inside and outside on the street. How could any wagon call get through such crowds without hurting or killing several people, which will be the case if the same is erected.

M. STRAUSS.

Mr. Strauss's original objection was that it would be unpleasant for visitors to be associated with convalescents. Now he has another cause of complaint. Up to the present writing, however, there have been no changes in the plans of the Sisters of Charity regarding their new hospital. It will go up.

NEWSPAPERS, MEDICINE, AND CHARITY.

THE *New York Herald* sent a quantity of the Saranelli yellow fever serum to Havana a while ago and requested that it be given a trial by the surgeon of the Marine Hospital Corps. Naturally, under the circumstances, one must look for the first report of its use in

the columns of the newspaper making the gift of serum. Such a report has been received by the *Herald*, from an Havana correspondent, and printed. It is in no sense a scientific report of results; merely a statement in narrative form. This is published elsewhere for what it is worth, and while, to scientific men, a recognised report of results published over a recognised name in a scientific journal would be more satisfactory, yet the correspondent's report of the trial is interesting.

Newspapers are into everything these days. By some this move of the *Herald* may be characterised as a stroke of the "yellow" enterprise, which has become so obnoxious to thinking, serious-minded people within the past few years. If it is so classified, then it is "yellow" in the right direction, for while the movement was inaugurated for advertising purposes, such plans might result in untold good, and it is a spending of money in the right direction. Just as *Life* and the *Tribune* advertising schemes, the fresh-air fund, has done untold good to hundreds of tenement tortured babies; and the *World's* free ice fund, and the *Journal's* free coal and free bread distribution. These are pure advertising schemes, but they carry with them much good to a great number of persons, and while to some ultra philanthropists, who prefer to investigate before relieving, it may seem cruel to use such methods for advertising purposes, the fact remains, nevertheless, that these newspapers do more good to the army of poverty-stricken sufferers, than all other methods combined.

Buffalo had an illustration of this a few years ago, during the "hard times" period, when want stalked forth and invaded the ragged homes of the unemployed. Organised charity investigated, and while its agents questioned and advised, the *Evening News* appealed to its readers for supplies. Food and clothing were asked for, and such a scene was enacted as was never before witnessed in Buffalo. Train load after train load of vegetables was sent into Buffalo in response to the appeal. Headquarters were established and bales of clothing and tons of food were distributed. Organised charity said the *News* was making paupers and putting a premium on poverty. Maybe so. But organised charity did not see the hollow-eyed, half-starved applicants who, while waiting relief, hungrily and publicly grabbed up raw potatoes or raw turnips and ate them before the eyes of the world in a public street of a city of over 300,000 inhabitants. That was plain hunger—the kind of hunger that means want and needs no investigation. That relief-plan advertised the *News*, but it filled

many an empty stomach and clothed many a naked form, and the vast good done by the newspaper overshadowed the advertising it received. If advertising of this nature does newspapers any good then they are entitled to it, for the benefits and relief they confer are of far greater value than those which they receive.

THE INTERNATIONAL MEDICAL CONGRESS OF 1900.

PREPARATIONS on a large scale are being made for the International Medical Congress, to be held at Paris, during the Universal Exposition of 1900. A large separate building is being erected on the exposition grounds, in which the different congresses are to be held—on the same plan as adopted at Chicago in 1893. One of the most important sections of the Medical Congress will be that on medico-legal science, under the able presidency of Prof. P. Brouardel, Doyen of the University of Paris, and the leading authority on legal medicine in Europe. He has arranged a series of reports for discussion as follows :

1. Pulmonary Docimacy. Reports in French (French "Rapporteur"). Messrs. Descoust and Bordas.
2. Actions (the effects) of the new smokeless powder on garments and the skin. Reports of Messrs. Thoinot and Vieille.
3. Ocular putrefaction as a means to determine the date of death. Report of M. Descoust.
4. The criminal combustion of corpses. Report of M. Ogier.
5. On accidental death by electricity. Reports of Messrs. d'Arsonval and Bordas.
6. Valvular lesions consequent upon (resulting from) the traumatism of the walls (coats) of the thorax. Reports of Messrs. Castiaux and Langier.
7. Expert examination rendered necessary by the accidents which might result from the frequent use of foods or drinks which have been conserved by chemical agents (borax, salicylic acid, formol, etc., etc.). Reports of Professors Brouardel and Pouchet.
8. On crimes (offences) resulting from the practice of magnetism by persons who have no diplomas. Reports of Messrs. Gilles de la Tourette and Rocher.

Besides these reports papers will be read on other important aspects of legal medicine and a valuable meeting seems to be insured. An auxiliary committee has been appointed in this country with Mr.

Clark Bell, the well-known editor of the New York Medico-Legal Journal, as chairman. This section, so ably officered, so well organized, and having so many important subjects under discussion ought to be one of the best attended of all the various meetings scheduled for the exposition season.

THE Board of Aldermen passed the Christian Science resolution "after election," as the JOURNAL said they would. Now it is going through the Board of Councilmen, where it has had a hearing.

THE *New York Herald* sent a supply of yellow fever serum to Havana recently. The results of its use are given in a cable to the *Herald* from one of its correspondents, who, writing under the date of November 9th from Havana, says :

The Sanarelli serum sent here by the *New York Herald* was given a practical and highly satisfactory test last week. The two patients to whom it was administered have fully recovered from yellow fever, and they have been placed in the convalescent ward. The sanitary measures taken by the American government and the liberal use of the electrical disinfectant has kept down a yellow fever epidemic in the city proper, but along the water front there have been spasmodic cases, and the Machina wharf seems to have been a great breeding place for the germ.

It was there that last May the first fatal cases were developed in the Marine Corps, and two engineers and a deck hand of Admiral Ctomwell's launch have since died there.

Dr. Raphael O. Marcour, of the United States Marine service, is the doctor in charge at the Machina. He is one of the youngest doctors in the service in Cuba, and has given yellow fever a special study. The several cases which come under his charge at the Machina were of a most virulent type, and nothing in the way of old remedies seemed to stop the progress of the disease.

The Sanarelli serum, which arrived in September, had been carefully laid aside by the staff of military doctors, who were tempted to look upon the use of serum as an experiment wholly outside of a military man's line. Last week, however, Dr. Marcour took the initiative.

Lawrence Fitzhugh, an assistant on the Admiral's launch, had been sick four days with a pronounced case of yellow fever. Black vomit had set in, and there was no hope by the ordinary treatment to save the man's life. Dr. Marcour applied to Maj. Gorgis for some of the *Herald's* Sanarelli serum.

That evening he injected some into the abdomen of Fitzhugh. In three hours there was a change for the better. The next day the black vomit stopped, and in three days all traces of yellow fever

had left the patient. He was, however, in a very weak condition on account of his severe illness before the serum was administered, and it took careful nursing to bring him around.

While Fitzhugh was recovering, another man, the steward of Dr. Marcour, John H. Sublette, was taken ill, and he had severe symptoms of the fever that had proved so fatal to the occupants of the *Machina*. Dr. Marcour, elated at the pronounced success in the case of Fitzhugh, immediately gave Sublette an injection of the serum, and from the moment it began to work on his system improvement in his condition was noticeable. The two men are fast recovering, and the doctor says that they will be at work again in a few days.

There is no doubt in the mind of Dr. Marcour that the Sanarelli serum is an antitoxin for yellow fever, and he has strongly urged its use in the yellow fever hospital here. He furthermore firmly believes that the serum is a preventive as well as a cure for the fever, and he is making arrangements to vaccinate one of the men on the Admiral's launch who has consented to submit to the operation.

It is shown by the experiments of Dr. Eugene Wasden, who was conducting the work in the yellow fever government experimental station here last spring, that the Sanarelli serum, when injected into rabbits and guinea-pigs used as subjects, caused a mild case of yellow fever, and a man treated similarly would be to all intents and purposes immune.

THE hearing before the councilmen lately held relative to the ordinance opposed by the faith healers was the most interesting as well as the clearest of all the many seances on that subject. Mr. Tracy C. Becker, of counsel for the Medical Society of the County of Erie, was particularly happy in the part he played.

He pointed out in unmistakable English that the language of the present ordinance is of very uncertain meaning, and declared: "As a lawyer, I doubt whether any person could be convicted under that section under any circumstances."

This ought to afford sufficient ground for the councilmen and aldermen alike to act promptly in framing a new ordinance that should compel all citizens who have knowledge on the subject, no matter how acquired, to report to the board of health all contagious diseases. No doubt it will have that effect.

As to the resolution proposed by the aldermen to soothe the perturbed spirits of the healers, it was natural for "Judge" Cunneen to contend for its adoption, for it is all he will have to show for the fee, presumed to be an ample one, that he receives for his services.

THE United States Marine Hospital Service has lately sent out a report giving the vital statistics of American cities during the year

1898. From this it appears that the death-rate in the State of New York was 18.46. If, however, the City of New York be left out of the account, the death-rate for the state, as a whole, would be somewhat lower.

Pursuing the examination of this report still further, and coming down to particular cities, we note that Buffalo is recorded as one of the most healthful of them all.

The Buffalo death-rate last year was 12.24. This reckoning is obtained on the basis of an estimated population of 370,000, the number of deaths from all causes during the year being 4,533. No city in the United States of equal size shows a death-rate so low. It is noticeable that nearly all the lake cities were comparatively healthful. Cleveland, with a population also estimated at 370,000, had a death-rate of 13.62.

Buffalo has reason to be proud of her record of healthfulness as officially indicated in this report, a condition directly referable to its efficient health department.

THE question of substitution is one of great interest and importance to physicians. A well-known house has recently brought to trial a druggist charged with the offense, and the following recent action of the court cannot fail to be of interest :

A decision of considerable importance (*Chicago Times-Herald*, October 13, 1899,) was made by Judge Kohlsaat in the United States Circuit Court yesterday. In a bill for an injunction Fairchild Brothers & Foster, of New York, had charged Edward Otto, a Chicago druggist, with substituting a spurious and inferior preparation for "Fairchild's essence of pepsine" in several cases where the latter was expressly called for in physicians' prescriptions. The case was hotly contested and hundreds of pages of depositions were taken in New York and Chicago. Judge Kohlsaat's decree sustains the charges made, perpetually enjoins Otto from ever repeating the offense and taxes him with the costs, amounting to about \$500. This is said to be the first contested case in the United States in which the principle of protection to trade-marks and trade names was extended so as to apply to what is technically known in the drug business as "substitution." Judge Kohlsaat's decision will probably protect manufacturing chemists, physicians and the general public, all of whom have in the past suffered from these fraudulent practices of a certain class of druggists.

The medical profession as well as druggists and pharmacists owe to Messrs. Fairchild Brothers & Foster a debt of gratitude for pushing this matter to a conclusive test.

It is reported that the Boers returned the British wounded recently delivered at Ladysmith without demanding equivalent in exchange. This, if true, is a commendable act of humanity; but it is more than probable that the act relieved the Boers quite as much as it pleased the English.

THE Major-Generals that edit the newspapers are continuing their hostile criticisms with a venomous sarcasm that sometimes borders upon positive disloyalty. An amusing instance of "smartness" was recently exhibited by a Buffalo paper that published an editorial entitled A Fruitless Victory, in which it criticised General Wheaton for withdrawing his troops after the San Jacinto affair. These are in part the words used :

It is said that the withdrawal was necessary because the roads were so bad that supplies could not be brought up. It is not easy to understand why supplies could not have been transported over roads upon which the soldiers themselves could march, especially when there were men and materials at hand to improve the roads.

Many a civil war soldier will smile at the stupidity of such a criticism. What novice in war does not know that soldiers can be moved forward under conditions that often preclude the transportation of supplies? This same newspaper printed about the same time dispatches stating the amount of rain falling in November in Luzon was unprecedented.

Even soldiers have to eat once in a while and occasionally they have to be resupplied with ammunition.

The war portfolio and its subordinates, even the administration, can afford sometimes to be delivered from its friends.

THE report of Surgeon-General Sternberg on the care and health of United States troops shows that all the Atkinsonsque criticism of the blue-Monday shouters was cut on the bias. The Surgeon-General has good cause to be proud of the record made by his office and his corps during the war.

RECORDS in the Health Department show that there are an unusual number of cases of measles and scarlet fever prevalent in the city. The cases greatly outnumber those of the same period for last year. A comparison of the figures for October of last year and the first ten days of November, show that there were 77 cases of scarlet fever,

106 cases of diphtheria, and only one case of measles. For the same period this year there are 145 cases of scarlet fever, 77 cases of diphtheria, and 169 cases of measles.

Reports of measles have been made at the Health Department at the rate of 20 to 30 a day. Most of the cases are in the east side of the city, along Broadway, Seneca, Lovejoy, Adams, Emslie, William and Watson Streets. Thus far only four cases have been reported on the west side during October and to the middle of November of this year. These cases are on Lafayette, Auburn and Plymouth Avenues, and on Grant Street.

Every precaution is being taken by the health authorities to stamp out the disease, but the great danger lies in the neglect of parents to keep their children at home until they have fully recovered. Several instances have been discovered where people have neglected to report cases, but investigation showed it was the result of not knowing that a disease existed, rather than an attempt to violate or evade the law.

Four deaths due to measles complications have been reported.

SURGEON-GENERAL STERNBERG'S annual report gives a comprehensive view of the health of the troops, in the field and at home, the casualties and losses in battle and in hospital, the care extended to the sick and wounded, and other interesting information relating to the physical welfare of the army.

General Sternberg says it has been his endeavor that the sick and wounded should be supplied with every comfort and restorative, and the surgeons with every appliance that modern science would suggest in the treatment of disease and injury.

The total number of deaths in our armies, including regulars and volunteers, from May 1, 1898, to June 30, 1899, was 6,619, of whom 496 were killed in battle, 216 killed by accident, 202 died of gunshot wounds and wounds received in action, 2,774 from typhoid fever, 476 from malaria fever, 359 from pneumonia, 342 from diarrhea and dysentery and 185 from yellow fever.

He refers to the agitation over canned roast beef and refrigerated beef, and says at that time there were on file only two complaints as to the beef supply. The only criticism made by medical officers, he says, is that the ration for the tropics should have less fat and more starch and sugar.

PERSONAL.

DR. WILLIAM G. BISSELL, of Buffalo, Major and Surgeon of the 74th Regiment, N. Y. N. G., recently tendered his resignation of that office. He has been obliged to give great and increasing attention to the duties pertaining to it, which materially interfered with his professional work. He has recently been appointed lecturer on bacteriology in the Dental Department of the University of Buffalo, which makes still further demand upon his time. Since the foregoing was announced in the newspaper press, it is stated that Major Bissell has temporarily withdrawn his resignation at the request of Col. Fox, Lieut.-Col. Cottle and other officers of the regiment and will continue with the 74th as surgeon until the regiment is settled in its new armory.

DR. MAUD J. FRYE, of Buffalo, one of the associate editors of the JOURNAL, began instruction to the class in home-nursing and training attendants, at the Women's Union, November 6, 1899. The course embraces lectures on the following practical subjects: Sick-room, sick-bed, bath, diet of children, cookery, enemata, douches and catheterisation, sleep, taking the pulse, temperature and respiration, entertaining the patient, poultice making, etc., administration of medicines, bandaging, convalescence after confinement, emergencies, quarantine and disinfection, care of baby and massage.

DR. EDWARD J. MEYER, who underwent an operation at the General Hospital a short time ago, has entirely recovered and resumed practice, at No. 1312 Main street. Dr. Meyer has given up general medical practice and is now confining himself to surgery.

DR. C. G. STIVERS, formerly of Niagara Falls, assistant editor of the *Southern California Practitioner*, has been appointed instructor in physical diagnosis in the Medical Department of the University of Southern California, at Los Angeles.

DR. CHARLES ST. JOHN, formerly of the Fitch Hospital, has been appointed house surgeon of the Riverside Hospital.

OBITUARY.

DR. EDWARD EVERETT STANBRO, U. of B., '92, died at his home in Buffalo, November 5, 1899, of phthisis pulmonalis, aged 30 years. Dr. Stanbro was well known to the younger generation of medical men in the city. Although on account of ill-health he was unable to establish himself as a physician, yet such were his life and character, that the medical profession is honored in being able to claim him as one of its members.

Edward Everett Stanbro was born in Springville, Erie County, N. Y., in 1869. He was the second son of a physician well-known in his time, Dr. George G. Stanbro. He was educated in the Academy of Springville and later entered the University of Buffalo, from which institution he received first the degree in pharmacy, later that in medicine. Shortly after his graduation in medicine, in 1892, he was obliged to go to Colorado, the double work which he had done in college having undermined a constitution never too strong. Returning in 1893, he practised medicine for a short time and later pharmacy. A second failure in health obliged him to change his occupation, and in 1897 he became a member of the staff of the *Buffalo Courier*. At the time of his death he held the position of dramatic editor on that paper, having won promotion by creditable and earnest work.

Dr. Stanbro was a modest man. Had he been asked he would have pronounced his life a failure. Measured by what he wished to do and was capable of accomplishing, but for the limitations placed about him, it was. But if we estimate the value of his life by the qualities which go to make true greatness it was a notable success. Those who knew his brave battle with disease and death, those who were cheered by his cheerfulness and gladdened by his mirth, who knew that thoughtfulness for others which showed itself in courtesy to all, in kindness and helpfulness to those whom he called friend, feel that life is forever richer because such an one has lived. Unassuming, kindly, sympathetic, most of all courageous,

"He bore without abuse
The grand old name of gentleman."

MARTHA DURKEE, wife of Dr. Roswell Park, of Buffalo, died at Lebanon, N. H., November 14, 1899. Mrs. Park went east some weeks before on a visit and was ill about three weeks, though her con-

dition was not considered serious until two days before her death, when alarming symptoms supervened, whereupon Dr. Park repaired to her bedside at once. Her sister, Mrs. Martin, of Chicago, was also with her. The remains were brought to Buffalo and the funeral was held from the residence of Dr. Park, 510 Delaware Avenue, November 16th.

Mrs. Park was prominent in church, charity and social circles and will be sadly missed from a home envired with refinement and happiness. Dr. Park receives the sympathies of wide professional and social circles in his bereavement.

MARTHA WHELOCK, wife of Dr. C. W. Bourne, of Hamburg, died November 14, 1899, of typhoid pneumonia, after a very short illness. Mrs. Bourne was a daughter of the late Silas B. Wheelock, one of the pioneers of this region, and was married to Dr. Bourne soon after the close of the Civil War. She leaves one daughter, Mrs. George Potter, and two sons, Dr. B. S. Bourne and Charles Bourne, of Hamburg. Mrs. Bourne was a member of the Hamburg M. E. Church, the Woman's Christian Temperance Union and several other organisations. Dr. Bourne is one of the most prominent physicians in Erie County and will receive the sympathy of a great community.

DR. CHARLES INSLEE PARDEE, one of the prominent physicians of New York, died suddenly at his home, No. 6 East 43d Street, November 4, 1899. He was apparently in his usual health attending to his professional duties up to the time he was taken suddenly sick, and he died in a half-hour after the attack.

Dr. Pardee was graduated from the New York University Medical School in 1860. He was a member of the Academy of Medicine and the Medical Society of the County of New York. He was also a member of the Military Order of the Loyal Legion, the New England Society and the Union League and Lotos Clubs. He was for many years dean of the New York University Medical School which some time ago was combined with the Bellevue Hospital Medical College. Dr. Pardee leaves a widow.

DR. MYRA K. MERRICK, alleged to be the first woman who practised medicine in Ohio and one of the first who practised in the entire country, died recently at Cleveland (about November 11, 1899), at the age of 74 years.

WILLIAM O. MILLER, of Rochester, a senior in the Medical Department of the University of Buffalo, died Thursday, November 23, 1899, at his boarding house, No. 152 Mariner street, aged 24 years. On the Sunday previous one finger of his right hand became numb and he suffered with pain in his right side. Paralysis gradually spread until Thursday morning, when he died. Drs. Putnam, Phelps and Cary attended Mr. Miller professionally. It is stated that he died of neuritis. The funeral was held from the University at 9.30 o'clock Friday morning, November 24th, and the remains were taken to Rochester.

SOCIETY MEETINGS.

THE Esculapian Club held its second regular meeting at the residence of Dr. C. J. Carr, November 16, 1899. Dr. Charles E. Congdon read a paper on Cancer of cervix uteri, with a report of twelve cases. The next meeting will be held at Dr. F. J. Carr's, December 21, 1899, when Dr. J. W. Charters will read a paper.

THE Buffalo Academy of Medicine held meetings during the month of November, 1899, as follows :

Section on Surgery.—Tuesday evening, November 7th. Program : Etiology and pathology of appendicitis and their bearing on the treatment, by Herman Mynter.

Section on Medicine.—Tuesday evening, November 14th. Program : Protracted pneumonia and slow resolution, by John H. Pryor ; Hygiene of the asthmatic, by George N. Jack, Depew, N. Y.

Section on Pathology.—Tuesday evening, November 21. Program : The relation of dentition to disease, by C. S. Butler, Esq., D.D.S. ; discussion opened by Irving M. Snow.

Section on Obstetrics.—Tuesday evening, November 28th. Lessons from practice in obstetrics, by P. W. Van Peyma ; Mensuration and capacity of the female bladder, Irving P. Lyon.

THE Niagara Falls Academy of Medicine held its last regular meeting at the office of Dr. W. A. Scott, 610 Pine Avenue, Monday, November 6, 1899, at 8.45 p. m. A paper was read by Dr. Scott and several matters of importance were discussed at this meeting.

COLLEGE AND HOSPITAL NOTES.

THE private hospital formerly conducted at 304 Lafayette Avenue is again open for the reception of private patients. It is the intention of the management to admit only the best class of private patients and to give them the best of care and attention. The hospital has been newly refurnished and made into a first-class private hospital, with all modern improvements and conveniences, and called the Lafayette Hospital. There is no staff of physicians in attendance; each physician sending a case has full control of the patient. Mrs. Lillian C. Lacey, who is in charge, is an experienced nurse and a capable manager. A cordial invitation is extended the profession to inspect the hospital.

A NEW emergency hospital is projected in Buffalo to replace the present one, which was established in 1883 as an adjunct to the Buffalo Hospital of the Sisters of Charity. This latter has become inadequate to the present needs, hence the authorities represented by the Sisters propose to build a new one.

It is stated that the new hospital will be thoroughly equipped, roomy and perfected in every particular. It will be four stories high, and there will be room for more than 100 beds, besides accommodations for nurses and other help necessary to the institution. Great care will be given to hygienic arrangements; there will be light on four sides, and heating and ventilating facilities, of the most approved kind, will be introduced.

An elevator of sufficient size to admit patients upon a stretcher will be built and cases needing surgical aid will be carried in the elevator to the fourth floor, where the operating room will be located. There will be wards for general patients and separate wards for each of the railroads. Private rooms will also be provided for such as may require them.

At the rear of the hospital will be the stables, which will contain two ambulances under "quick hitch" regulations, the drivers' apartments being overhead. Neatly arranged grounds, with lawns, shrubbery, etc., will surround the building.

LADY RANDOLPH CHURCHILL is heading the American women's movement in London for fitting out a hospital ship for South African Service, and the American committee has already collected

more than \$40,000, after the Atlantic Transport Company has supplied the vessel. Mrs. James Brown Potter recently gave a concert and dramatic recital for the fund which realised a large sum. The entertainment was held at Claridge's Hotel and was called a *thé chantant*. A London despatch of November 18th, among other things said that the exquisitely decorated rooms were thronged with the exclusive set of fashionable people in brilliant attire, including the Prince of Wales, the Duke of Cambridge, Princess Christian, of Schleswig-Holstein, Princess Aribert, of Anhalt and Princess Victoria of Schleswig-Holstein. The last three were accompanied by Mrs. Hopkins, of New York, the Duchess of Marlborough, Mr. and Mrs. Joseph H. Choate, Mrs. Ogden Goelet, Mrs. Arthur Paget, Lady Tweedmouth, Lady Lansdowne and a host of others.

The hospital ship is to be called *The Maine* in honored memory of our battleship, which was blown up by the Spaniards in Havana harbor, and something over £1,700 was added to the Maine fund as the result of the entertainment. A more charming and successful gathering has seldom been witnessed at any social function in London than was present at that of the American women in their effort to increase the Maine fund.

At Lady Randolph's request Mrs. Whitelaw Reid has already selected and sent forward American nurses for the ship. It is quite evident that war in London charities will be conducted on a large scale throughout the winter, and that all the arts and wiles of *cadging* will be devoted to patriotic use. Life has suddenly become real and earnest among the gilded youth and fashionable dawdlers in *Vanity Fair*.

IT IS announced that Niagara Falls is soon to be supplied with a maternity hospital. A recent dispatch¹ says that Messrs. Orchard & Jorolemon, architects of that city, are engaged in preparing plans for a maternity hospital which is to be constructed and presented to the City of Niagara Falls by Benjamin F. Thurston, as a memorial of his wife, who died recently.

The hospital it is stated will be as well equipped and complete as any in the state. It will be located to the left of the Memorial Hospital, and will be of the colonial style of architecture. It will be divided into private and public wards.

AT THE annual meeting of the New York Skin and Cancer Hospital, at Second Avenue and Nineteenth Street, on November 17th, the

following officers were elected: President, J. Cleveland Cady; vice-president, William C. Witter; secretary, Dr. L. Duncan Bulkley, and treasurer, Edward Winslow.

The report for the year shows remarkable growth in the work of the hospital. More than 3,000 cases have been treated, and 13,000 visits made in its out-patient department—a third more than ever before.

The field of this hospital is mainly among working people. An eczema that renders a teacher, saleswoman or waitress unacceptable on account of her appearance, or that destroys the sleep of an engineer or laboring man, ends self-support and independence. To such it holds out the only relief they are likely to find, for it is the only one in the country that makes a specialty of such maladies.

The hospital is dependent upon the public for support in doing its work of "helping people to help themselves."—*New York Tribune*.

Book Reviews.

A TREATISE ON SURGERY. By American authors. Edited by ROSWELL PARK, M. D., Professor of Surgery in the University of Buffalo, N. Y. New condensed edition in one royal octavo volume of 1262 pages, with 625 engravings and thirty-seven full-page plates in colors and monochrome. Philadelphia and New York: Lea Brothers & Co.

When the first edition of this work appeared, now some three years gone, it was in two volumes, of which the JOURNAL entered into somewhat extended consideration. [December, 1896, p. 385.] At present we shall content ourselves with general rather than special observations on this edition.

In the first place we note the condensation of the work into one volume. On some accounts a one volume treatise is more satisfactory; it can be readily consulted without loss of time; it is cheaper in price; and, moreover, it is quite as apt to be succinct without detriment to its value as a text-book. As against this a single volume is likely to be somewhat clumsy or weighty to handle—this being the case in the present instance. However, all things considered, we think a single volume treatise is in the main to be preferred, and we have no doubt in this particular case the change will contribute to increase the popularity of the work.

Next, it may be observed that there are two editions of the work extant, a somewhat novel circumstance, one, however, which will enable a designing purchaser to choose for himself as between the one and the two volume editions. In this relation it may be in place to note that the reduction in price of the one volume edition has been pro-

portionately much greater than the reduction of the material. There are many teachers who will naturally prefer the two volume edition, and probably a good many practitioners who will be like-minded. On the other hand, a large number of students and surgeons will find the one volume adequate.

It is probable that editor and publisher have been greatly surprised at the success the work achieved so soon after its publication, hence the issue of this condensed style, without material reduction of the matter it contains.

In our former notice we made special reference to the section on surgical pathology, of which the editor is the author. This section, at first, contained so much that was new, it has hardly yet been overtaken by the advance of science. However, the author has made some revisions of the text to keep the several topics dealt with abreast of his own studies and investigations. He is particularly happy in his treatment of the subjects embraced in this section, especially in the distinction made between hyperemia and inflammation, the insistence upon the practical importance of bacteriology, the development of autointoxications, and his teaching as to the surgical pathology of the blood. It is demonstrated in this section that Professor Park is a painstaking worker, who appreciates the importance of combining laboratory research and clinical study, insisting upon exactitude in both as far as it is possible to do so.

The contributions by a large staff of eminent surgeons are most creditable in character and indicate the progressive American spirit. Nowhere is medicine more advanced than in this country, and the fact is amply attested by the contributions to this treatise. We made previously detailed comment as to their several parts, which we need not repeat now as what we said holds equally good today and with even greater cogency. It may be well, however, to recall their names for the benefit of any who may not have seen the first edition. They are: William T. Belfield, Arthur Dean Bevan, Clarence J. Blake, Edward H. Bradford, Charles Stedman Bull, Herbert L. Burwell, D. Bryson Delavan, Frederic S. Dennis, James H. Etheridge (now deceased), Duncan Eve, John A. Fordyce, Frederic H. Gerrish, Arpad G. Gerster, William A. Hardaway, Hobart Amory Hare, James M. Holloway, Charles B. Kelsey, Robert W. Lovett, Rudolph Matas, Henry H. Mudd, Charles B. Nancrede, Roswell Park (the editor), Charles B. Parker, John Parmenter, Joseph Ransohoff, Maurice H. Richardson, Chauncey Pelton Smith, and Edmond Souchon. It would be difficult to form a second group, equal in number, of eminent American surgeons without including any of these. Their work makes the treatise distinctively American in character—an interesting fact. While science is for all the world and not for any geographic division thereof, it is yet pleasant to contemplate that here is one of the best treatises extant on surgery, written wholly by American authors, containing much material that is really even in advance of its period of issue, as well as preserving all the accumulation of the past that has stood the test of time.

A word should be said as to the illustrations. These have commanded the special attention of the editor, most of which have been made expressly for this treatise. Colors have been frequently used, wherever, indeed, they could be made available to bring out the subject of a plate more potently. The camera has been most skillfully employed in a large number of original cases, and wood engravings, etchings, and drawings unite to give variety and accuracy to the illustrations.

Finally, the treatise is to be commended to every student of surgery—undergraduate or practitioner—who would wish to obtain the best, and to study it attentively with a view to accepting it as a guide.

THE MECHANICS OF SURGERY. Comprising detailed descriptions, illustrations and lists of instruments, appliances and furniture necessary in modern surgical art. By CHARLES TRUAX. Chicago. 1899.

As a rule when one picks up a book of this character the first thought is one of disinterested curiosity, for the idea is so intimately associated with uninteresting and slap-dash illustrations of individual manufacturing catalogues of surgical instruments. In the case of the mechanics of surgery, however, Mr. Truax has prepared a volume which is in no sense a catalogue. It has no price lists, is not confined to any one make of instrument, nor does it contain the slightest suspicion of individual advertisement. These virtues make it distinctly a work of art, and a most valuable educational volume. How little the average practitioner knows of the various instruments used in medicine and surgery and their uses is well known; so well known that it needs no more than passing reference here. Certain it is that such a work has long been needed. True, there have been publications of volumes illustrative of the uses of instruments, but they have been cursed with the individuality of the publisher, who in every case has been a maker of instruments and who confined his literary and artistic efforts to booming his own make. This is not so with the Truax volume. No matter where an instrument is made; no matter who the maker, if it is valuable it has a place in the Truax book.

There is a lamentable lack of attention paid to instruments and their proper care and uses in the text-books on surgery; if one needs an instrument and goes to a dealer, he is limited in his choice to the dealer's stock, which too often is limited, either in quantity, quality or make. If he appeals to a catalogue he is confronted with a lot of wood-cut abortions, trimmed with the glossy language of commercial self-laudation.

In the Truax book all this is obviated. It was prepared to fill an unoccupied nook in surgical literature and it comes pretty near meeting all the requirements. Mr. Truax is an instrument maker. It is not his business; it is his profession; yet he does not confine himself to his own make of appliances, but illustrates the most serviceable and best instruments made, whether they are manufactured by Truax, Tieman, Kny, or any of the lesser lights. And strangely enough he confines himself to instruments in contradis-

tion to previous workers in this field who, after describing their own instruments, proceed to give voluntary advice regarding operative methods, which judging by the general aspects is more or less of a rehash of surgical text-books, prepared by medico-literary hacks.

Mr. Truax's experience has been gained by close attendance at clinics, both in this country and Europe, and by personal work in the preparation of the articles necessary to the physician and surgeon; and while he tells the uses of an instrument he does not presume to direct its use. For instance, he explains how a plaster-of-Paris bandage is prepared, but not how it is applied. He leaves something for the colleges to teach.

One very gratifying portion of the book is that which deals with the standard nomenclature of instruments. A plea is made for uniformity. A periosteal elevator is the name of an instrument which is commonly and variously called a levator, raspatory, dry dissector, elevator, periosteotome. Spring dressing forceps are spring dressing forceps and not thumb forceps, dissecting forceps, plain artery forceps, tissue forceps, or nippers. These are illustrations of evils Mr. Truax is endeavoring to correct.

A chapter is devoted to the history of surgical instruments, which is highly interesting; another is given to the construction and care of instruments, which is valuable, coming as it does from a man who knows all about them from the forge to the surgeon's hands. Then follows careful description and admirable illustrations of everything pertaining to instrumental medicine and surgery in general and special and regional surgery.

The book is a complete work and it is valuable. And that is a good deal to say of any work of literature in these days.

N. W. W.

THE MEDICAL COMPLICATIONS, ACCIDENTS AND SEQUELÆ OF TYPHOID OR ENTERIC FEVER. By HOBART AMORY HARE, M. D., B. Sc., Professor of Therapeutics in the Jefferson Medical College of Philadelphia; Physician to the Jefferson Medical College Hospital; Laureate of the Medical Society of London, of the Academie Royale de Médecine de Belgique, etc. With a special chapter on the Mental disturbances following typhoid fever. By F. X. Dercum, M. D., Clinical Professor of Diseases of the Nervous System in the Jefferson Medical College. Octavo, 267 pages, twenty-one engravings and two full-page plates. Philadelphia and New York: Lea Brothers & Co. 1899.

This monograph deals with the complications of a disease of world-wide prevalence. Within the recollection of the writer, the profession has changed front in the management of the malady two or three times. First, it was depletion, next stimulation, and now it is reduction of temperature and cautious nutrition. This statement, of course, applies to classic typhoid. There are all degrees of variation admissible in the management of aberrant forms of the disease such as this treatise deals with. It is these irregular manifestations that tax the knowledge of the diagnostician and resource of the therapist, often putting them to the severest test.

On this account such a book as Hare's will be welcomed by the general practitioner of medicine, the doctor residing in the small city, village or hamlet, because he can draw from it aid in those obscure varieties of the malady that he is accustomed to meet and for which he needs the promptest and best advice. Without doubt one of the most essential questions relative to the consideration of typhoid fever is diagnosis; and in its obscure or aberrant forms this often becomes most difficult, even to the experienced clinician. This is most true when typhoid fever and malaria are interblended, as they so frequently become nowadays, especially during military campaigns. This is most strikingly set forth in the recent paper of Dr. Victor C. Vaughan, editorial comment upon which we made in the edition of the JOURNAL for June, 1899.

The present book, with which we have especially to deal at this time, is made up of seven chapters, embracing the following titles: (1) General consideration; (2) varieties of onset; (3) The aberrant symptoms, status or complications of the well-developed stage of the disease; (4) Complications of the period of convalescence; (5) The conditions which ape typhoid fever; (6) duration and immunity to second attack; and (7) the mental complications. From these headings it will be observed that almost every complication or form of aberrance that the disease may take on is herein dealt with, and, it is needless to add, in the most intelligent, clear and scientific way. The monograph of Keen on the surgical complications and sequelæ of typhoid fever, and this one of Hare's dealing with its medical complications, constitute the most important contributions to the recent literature of a disease with which every American physician should become familiar.

PUBLIC HEALTH REPORTS. Issued by the Supervising Surgeon-General Marine Hospital Service, under the national quarantine act of April 29, 1878, and the act granting additional quarantine powers and imposing additional duties upon the Marine Hospital Service, approved February 15, 1893. Volume XIII. Nos. 1 to 52. Washington: Government Printing Office. 1899.

ANNUAL REPORT OF THE SUPERVISING SURGEON-GENERAL OF THE MARINE HOSPITAL SERVICE OF THE UNITED STATES, for the fiscal year 1898, Centennial Year. Octavo, pp. 855. Washington: Government Printing Office. 1899.

These two books furnish substantial evidence of the progress making in the fields of public health and preventive medicine. The first named—Public Health Reports—is a handsome volume, of over 1,500 pages, bound in red cloth, containing the regular weekly reports of the service that have been punctually received by the JOURNAL. It is an excellent plan, however, for the department to issue them in book form at the end of the year, as it affords a convenient reference volume for all interested in vital statistics, or any other question pertaining to the public health. Besides there are in it many valuable reports and papers relating to infectious and epidemic diseases, such as cholera, yellow fever, plague, smallpox and the like.

The second book, of which the title appears above, is an elaborate report by Dr. Walter Wyman, the supervising Surgeon-General of the Marine Hospital Service, for the fiscal year ending June 30, 1898, which is also the centennial year of the service. It is accompanied by the usual documents relating to the conduct of the service all over the world and contains much of special interest to public health officers.

It was the intention of Dr. Wyman, as he declares in his report, to have included at this time a history of the development of the service, together with a full description of its present legal status, its functions and personnel; but the war with Spain and the added work on account of the yellow fever outbreak in the south, superseded all other demands upon his time, and he has, in consequence, been obliged to defer his historical summary until his next annual report. In this one, however, there is much interesting material that deserves examination at the hands of all engaged in the public health service.

THE PHYSICIAN'S VISITING LIST (Lindsay & Blakiston's) FOR 1900. Forty-ninth year of its publication. Philadelphia: P. Blakiston's Son & Co. 1900.

This old favorite has again been placed on the market with its usual promptitude. It has stood the test of time and contains everything needful in the way of a pocket memorandum of daily work for the busy physician. It is furnished in several styles at different prices—a full description will be found on page xvi. of our advertising columns, *q. v.* It is simple in make up, compact and convenient.

It is for sale by all booksellers, or it will be sent by the publishers, 1012 Walnut Street, Philadelphia, postage prepaid, on receipt of price.

THE MEDICAL NEWS VISITING LIST FOR 1900. Weekly (dated, for 30 patients); monthly (undated, for 120 patients per month); perpetual (undated, for 30 patients weekly per year); and perpetual (undated, for 60 patients weekly per year). The first three styles contain 32 pages of data and 160 pages of blanks. The 60-patient perpetual consists of 256 pages of blanks. Each style in one wallet-shaped book, with pocket, pencil and rubber. Seal grain leather, \$1.25. Thumb-letter index, 25 cents extra. Philadelphia and New York: Lea Brothers and Co.

Since a visiting list of some sort has become indispensable the only question for a physician to determine is, which one of the several good ones on the market shall be purchased? In making a selection for the first year of the new century, the *Medical News Visiting List* will be found in the front rank and on the first shelf.

Its blank pages are arranged to classify and record memoranda and engagements of every description occurring in the practice of the physician, surgeon or obstetrician.

The book opens with 32 pages of printed data of the most useful sort, including an alphabetical table of diseases with approved remedies, a table of doses, sections on examination of urine, artificial respiration, incompatibles, poisons and antidotes, a diagnostic table

of eruptive fevers, and a full-page plate, showing at a glance the incisions for ligation of the various arteries, a useful guide in such emergencies. It is issued in four styles, adapted to any system of records and any method of keeping professional accounts. It is printed on fine, tough paper, suitable for pen or pencil, and durably and handsomely bound in the size of a wallet for the pocket. When desired a ready reference thumb-letter index is furnished, which is an economiser of time. Taken as a whole, it is one of the best, and no mistake can be made in purchasing it.

BOOKS RECEIVED.

Clinical Lectures on Neurasthenia. By Thomas D. Gavill, M. D., Physician to the West-End Hospital for Diseases of the Nervous System, London; Examiner for Clinical Medicine in the University of Glasgow; formerly Medical Superintendent of the Paddington Infirmary; Assistant Physician to the West London Hospital. Octavo, pp. 144. New York: William Wood & Co. 1899.

An Atlas of the Bacteria Pathogenic in Man. With descriptions of their Morphology and Modes of Microscopic Examination. By Samuel C. Shattuck, F. R. C. S., Joint Lecturer on Pathology and Bacteriology at St. Thomas's Medical School, London; Pathological Curator of the Museum of the Royal College of Surgeons, London. With an introductory chapter on bacteriology: its practical value to the general practitioner. By W. Wayne Babcock, M. D., Pathologist to the Kensington Hospital for Women; Clinical Pathologist to the Medico-Chirurgical Hospital, etc. Sixteen full-page colored plates. Price, \$1.00. New York: E. B. Treat & Co. 1899.

Tenth Annual Report of the State Commission on Lunacy, October 1, 1897, to September 30, 1898. Transmitted to the legislature April 10, 1899. New York and Albany: Wynkoop-Hallenbeck-Crawford Co., State Printers. 1899. From Hon. Henry W. Hill, Member of Assembly, Buffalo.

Transactions of the American Surgical Association. Volume XVII. Edited by DeForest Willard, A. M., M. D., Ph. D., Recorder. Printed for the Association and for sale by William J. Dornan, Philadelphia. 1899.

Collins and Rockwell's Physiology. Just ready. A Pocket Text-Book of Physiology. By H. D. Collins, M. D., Assistant Demonstrator of Anatomy, and W. H. Rockwell, Jr., A. B., M. D., Assistant Demonstrator of Anatomy, College of Physicians and Surgeons, New York. In one handsome 12mo volume of 316 pages with 153 illustrations. Cloth, \$1.50 net.

The Urine and the Clinical Chemistry of the Gastric Contents, the Common Poisons and Milk. By J. W. Holland, M. D., Professor of Medical Chemistry and Toxicology, Jefferson Medical College of Philadelphia. Sixth edition, revised and enlarged. Duodecimo, forty-one illustrations. Cloth, price, \$1.00 net. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street.

Twentieth Century Practice. An International Encyclopedia of Modern Medical Science. By leading authorities of Europe and America. Edited by Thomas L. Stedman, M. D., New York City. In twenty volumes. Volume XVIII. Syphilis and Leprosy. New York: William Wood & Co. 1899.

A Practical Treatise on Materia Medica and Therapeutics. By Roberts Bartholow, M. A., M. D., I.L.D., Professor Emeritus of Materia Medica, General Therapeutics and Hygiene in the Jefferson Medical College of Philadelphia; formerly Professor of Materia Medica and Therapeutics and of the Practice of Medicine in the Medical College of Ohio, etc., etc. Tenth edition, revised and enlarged. Octavo, pp. xxii.—866. New York: D. Appleton & Co. 1899.

Essentials of Diseases of the Skin Including the Syphilodermata. Arranged in the form of questions and answers, for students of medicine. By Henry W. Stelwagon, M. D., Ph. D., Clinical Professor of Dermatology in the Jefferson Medical College; Physician to the Department of Skin Diseases in Howard Hospital, etc. Fourth edition, revised and illustrated. Saunders's Question Compend No. 11. Price, \$1.00. Philadelphia: W. B. Saunders. 1899.

Essentials of Medical Chemistry, Organic and Inorganic. Containing questions of Medical Physics, Chemical Philosophy, Analytical Processes, Toxicology, etc. Arranged for students of Medicine. By Lawrence Wolff, M. D., Demonstrator of Chemistry, Jefferson Medical College; Physician to the German Hospital, etc., etc. Fifth edition, revised by Smith Ely Jelliffe, M. D., Ph. D., Professor of Pharmacognosy, College of Pharmacy, New York, etc. Saunders's Question Compend No. 4. Price, \$1.00. Philadelphia: W. B. Saunders. 1899.

Essentials of Anatomy Including the Viscera. Arranged in the form of questions and answers, for students of medicine. By Charles B. Nancrede, M. D., Professor of Surgery and Clinical Surgery in the University of Michigan; Emeritus Professor of General and Orthopedic Surgery, Philadelphia Polyclinic, etc. Sixth edition, revised by Fred J. Brockway, M. D., Assistant Demonstrator of Anatomy, Columbia University, New York. Saunders's Question Compend No. 3. Price, \$1.00. Philadelphia: W. B. Saunders. 1899.

Essentials of Physical Diagnosis of the Thorax. By Arthur M. Corwin, A. M., M. D., Instructor of Physical Diagnosis at Rush Medical College; Attending Physician to the Central Free Dispensary, etc. Third edition, revised and enlarged. Price, 1.00. Philadelphia: W. B. Saunders. 1899.

Warner's Pocket Medical Dictionary of Today. Comprising pronunciation and definition of 10,000 essential words and terms used in medicine and associated sciences, and tables of arteries, nerves, muscles, etc. Arranged for convenient reference. By William R. Warner. Copyright. Price, 75 cents. Philadelphia: William R. Warner & Co. 1899.

Lectures upon the Principles of Surgery. Delivered at the University of Michigan. By Charles B. Nancrede, A. M., M. D., LL. D., Professor of Surgery and Clinical Surgery; Emeritus Professor of General and Orthopedic Surgery, Philadelphia Polyclinic, etc., etc. With an appendix containing a résumé of the principal views held concerning inflammation. By William A. Spitzley, A. B., M. D., Senior Assistant in Surgery, University of Michigan. Illustrated. Price, \$2.50. Philadelphia: W. B. Saunders. 1899.

A Text-Book of Embryology for Students of Medicine. By John Clement Heisler, M. D., Professor of Anatomy in the Medico-Chirurgical College, Philadelphia. With 190 illustrations, of which twenty-six are in colors. Price, \$2.50. Philadelphia: W. B. Saunders. 1899.

Operative Surgery. By Joseph D. Bryant, M. D., Professor of the Principles and Practice of Surgery, Operative and Clinical Surgery, University and Bellevue Hospital Medical College; Visiting Surgeon to Bellevue and St. Vincent's Hospitals; Consulting Surgeon to the Hospital for Ruptured and Crippled, Woman's Hospital and Manhattan State Hospital, etc. Volume I. General Principles, Anesthetics, Antiseptics, Control of Hemorrhage, Treatment of Operation-Wounds, Ligature of Arteries, Operations on Veins, Capillaries, Nervous System, Tendons, Ligaments, Fasciæ, Muscles, Bursæ and Bones, Amputations, Deformities, Plastic Surgery. This volume contains 749 illustrations, forty-nine of which are colored. New York: William Wood & Co. 1899.

The Modern Treatment of Wounds. By John E. Summers, Jr., M. D., Surgeon-in-Chief to the Clarkson Memorial Hospital; Attending Surgeon Douglas County Hospital; formerly Professor of the Principles and Practice of Surgery and Clinical Surgery, Omaha Medical College; Ex-President of the Western Surgical and Gynecological Association, the Nebraska State Medical Society, and the Omaha Medical Society. Omaha: Medical Publishing Co., Publishers. 1899. Price \$1.50.

The Surgical Diseases of the Genito-urinary Tract, Venereal and Sexual Diseases. A text-book for students and practitioners. By G. Frank Lydston, M. D., Professor of the Surgical Diseases of the Genito-Urinary Organs and Syphilology in the Medical Department of the State University of Illinois; Professor of Criminal Anthropology in the Kent College of Law; Surgeon-in-Chief of the Genito-Urinary Department of the West-Side Dispensary. Fellow of the Chicago Academy of Medicine; Fellow of the American Academy of Political and Social Science; Delegate from the United States to the International Congress for the Prevention of Syphilis and the Venereal Diseases, held at Brussels, Belgium, September 5, 1899, etc. Illustrated with 233 engravings. $6\frac{1}{2} \times 9\frac{3}{4}$ inches. Pages xvi-1024. Extra Cloth, \$5.00, net; sheep or half-Russia, \$5.75 net. Philadelphia. The F. A. Davis Co., Publishers, 1914-16 Cherry St.

Bacteriology in Medicine and Surgery. A practical manual for physicians, health officers and students. By William H. Park, M. D., Associate Professor of Bacteriology and Hygiene in the University and Bellevue Hospital Medical College, New York. In one 12mo volume, 688 pages, with 87 illustrations in black and colors, and two full-page colored plates. Just ready. Cloth, \$3.00 net.

Annual and Analytical Cyclopedica of Practical Medicine. By Charles E. de M. Sajous, M. D., and 100 associate editors. Assisted by corresponding editors, collaborators and correspondents. Illustrated with chromo-lithographs, engravings and maps. Volume IV. Infants, diarrheal diseases of, to mercury. Philadelphia, New York and Chicago: F. A. Davis Company. 1899.

A Text-Book of Materia Medica, Therapeutics and Pharmacology. By George Frank Butler, Ph. G., M. D., Professor of Materia Medica and of Clinical Medicine in the College of Physicians and Surgeons, Medical Department, University of Illinois, Chicago; Professor of General Medicine and Diseases of the Digestive System, Chicago Clinical School; Attending Physician to Cook County Hospital, etc., etc. Third edition, thoroughly revised. Handsome 8vo volume of 874 pages. Illustrated. Philadelphia: W. B. Saunders. 1899.

Treatise on Orthopedic Surgery. By Edward H. Bradford, M. D., Surgeon to the Children's Hospital and the Samaritan Hospital; Assistant professor of Orthopedic Surgery in Harvard Medical School; and Robert W. Lovett, M. D., Assistant Surgeon to the Children's Hospital; Surgeon to the Infants' Hospital. Illustrated with 621 engravings. Second revised edition. New York: William Wood & Company. 1899.

A Text-Book of the Practice of Medicine. By James M. Anders, M. D., Ph. D., LL. D., Professor of the Practice of Medicine and of Clinical Medicine in the Medico-Chirurgical College, Philadelphia; Attending Physician to the Medico-Chirurgical and Samaritan Hospitals, Philadelphia, etc. Octavo, pp. 1292. Illustrated. Third edition, revised. Price, cloth, \$5.50; sheep, \$6.50. Philadelphia: W. B. Saunders, 925 Walnut Street. 1899.

An American Text-Book of Surgery. For practitioners and students. By Phineas S. Conner, M. D., Frederic S. Dennis, M. D., William W. Keen, M. D., Charles B. Nancrede, M. D., Roswell Park, M. D., Lewis S. Pilcher, M. D., Nicholas Senn, M. D., Francis J. Shepherd, M. D., Lewis A. Stimson, M. D., J. Collins Warren, M. D., and J. William White, M. D. Edited by William W. Keen, M. D., L.L. D., and J. William White, M. D., Ph. D. Third Edition Thoroughly revised. Imperial 8vo pp. xvi.—1228. Price, \$7.00 cloth; \$8.00 sheep, and \$9.00 half-Russia. Philadelphia: W. B. Saunders, 925 Walnut Street. 1899.

RECENT mail advices from Manila received at the War Department show that General Otis has established a medico-legal department in Manila, in charge of two Filipino physicians, José R. Hidalgo and Gregorio Singlan. An emergency ward and dissecting-room has also been established for post mortem examinations. The department is to be subject to the orders of the Supreme Court and the tribunals of justice in the city of Manila.

LITERARY NOTE.

THE current issue of *Therapeutic Notes* contains an interesting article on the propagation of vaccine, which is of special interest to the medical profession. In view of the active campaign the anti-vaccinationists are waging, it is important that physicians shall familiarise themselves with the methods employed in the propagation of animal vaccine. Most of all, they must know where to get it in a pure, uncontaminated state.

The article referred to contains illustrations in half-tone of the biological department of Messrs. Parke, Davis & Co., Detroit, showing the details of the method employed. It impresses one with the perfection of the system and gives confidence in the vaccine that results from it. The article will be furnished on application to the aforementioned house.

ADDITIONAL PERSONALS.

DRS. E. C. W. O'BRIEN and E. T. Smith have been appointed by the Sister Superior and the Medical advisory board of the Buffalo Hospital of the Sisters of Charity, as consultants to that institution in cases of diseases of the nervous system.

MISCELLANY.

THE Physicians' Pocket Manual, is the name of a compact little book sent out to the medical profession by Messrs. Parke Davis & Co., of Detroit. It contains a fund of information about pharmaceutical and biological remedies, fifty-eight pages of which are devoted to a property and dose list. The manual further includes tables of metric equivalents, a table for making solutions, a complete index, an exhaustive list of botanical synonyms, besides many items of valuable information in the form of "notes."

In addition it is not out of place to note that it presents an array of over thirty distinct lines of remedial agents, comprising nearly 5,000 separate products. All this bears testimony to the growth of this great house, the magnitude of the scientific work it carries on, and the great volume of business it transacts. Its methods have won the confidence of the medical profession and it is easy to discover that it is the purpose of all who are conducting its affairs to strive to maintain this esteem.

BUFFALO MEDICAL JOURNAL.

VOL. XXXIX.—LV. JANUARY, 1900.

No. 6.

Original Communications.

ETIOLOGICAL RELATION OF AUTOINTOXICATION AND AUTOINFECTION TO DISEASES OF THE EYE.¹

By ALVIN A. HUBBELL, M. D.,

Clinical professor of ophthalmology in the University of Buffalo, Buffalo, N. Y.

AUTOINTOXICATION has long been recognised in the history and etiology of disease, but under other names. Netter, in 1884, was the first to use the term, but in a sense somewhat technical and narrow. It was the eminent physician, Bouchard, who gave the term its present signification by broadening its scope so as to include poisoning, not only from materials normally present in the tissues, but from toxic products due to bacterial activity or tissue metabolism.

Autointoxication, then, is self-poisoning, whether by the excess or retention of normal products, or by abnormal products generated within the body. The term should be used in a different sense than that of autoinfection, which implies a direct germ invasion and activity, and is not of as common occurrence. It is possible that a septicemia may come from infection started within the body, or that under extraordinary circumstances, the bacterium coli, so universally present in the intestines, and perhaps normally so, may become active and lead to inflammatory processes near its habitat or even in remote parts of the body. I think I have seen a case of this kind in a man about seventy years of age upon whom I operated for cataract several years ago. I had performed a small iridectomy preliminary to the extraction, which was made about four weeks afterward. Recovery from both operations was rapid and complete. The patient had for years been subject to an obstinate constipation, and being rather

1. Read at the meeting of the New York State Medical Association, October 26, 1899.

careless in his habits and toilet, he would often resort to mechanical measures for securing relief, and the instrument nearest at hand and the most convenient for him was his finger. Before operating, as is always my custom, I took the precaution to free his bowels, for by so doing much infectious and toxic material is eliminated, and there is therefore less danger of inflammatory reaction. This patient was dismissed from the hospital two weeks after the cataract operation, cured. A few weeks later he was fitted to a glass with which vision V.=5-6, nearly normal, and he went home. In about three months he returned, suffering from a severe iridocyclitis with hypopyon. On inquiry I found that he was chronically constipated, and had unduly exposed himself to cold; and it has always been my belief that, through exposure and the nonresisting condition of the parts which this and the operation had brought about, infection took place. This infection was undoubtedly from within, as there was no corneal ulceration or other external communication, and the inflammation was of the iris and ciliary body. I have not been able to rid myself of the idea that this infection also came from the colon bacilli which must have been superabundant in the intestines, and possibly present in other parts of the body, even in the tissues of the eye. I may add that after evacuating the pus by means of a corneal incision, the patient recovered with vision 5-12. A few other experiences have led me to attribute the unusual reactions presented to autoinfection, or perhaps to endoinfection, which I believe to be a term more fully covering the conditions. Infective endocarditis, otitis media in cases of pneumonia or influenza, tubercular arthritis, metastatic orchitis in mumps, etc., are undoubted examples of endoinfection.

Auto- and endoinfection, are therefore not uncommon, but in disease generally they are infrequent as compared with autointoxication. The latter is a wide-spread condition, and may not only accompany the infectious processes, as in typhoid fever, diphtheria, etc., but may originate independently through the development of toxic agencies in the digestive tract and other cavities, and by the metabolism of the tissues of the body. The contents of the gastrointestinal canal are nutrient-culture media for myriads of bacteria, and the products of their activity are supposed to be very numerous, this activity varying according to the character of the ingesta, the gastrointestinal secretions and the peristaltic movements. These products may be gases, acids and their compounds, various compound alkalies (indol, phenol, skatol, cresol, tyrosin), and numerous ferments, enzymes, ptomaines and toxalbumins. These may be taken up into

the circulation and carried to all parts of the body, and veritable poisonings are the result. Undoubtedly, bacterial action upon the contents of other cavities oftentimes develops toxic products, which may also gain access to the circulation and cause abnormal conditions.

Of no less importance in the production of autointoxication are the normal and abnormal products of tissue-metabolism. Excess of the former, as in over-secretion, diminished excretion or lack of chemical metamorphosis, as illustrated in thyroid disease, in nephritis, and in cirrhosis of the liver, and the presence of the latter, as in glycosuria and other diseases, become equally deleterious.

It is impossible for me to enter into a detailed consideration of the origin and nature of the numerous toxic agencies whose influence are so potent in the development and perpetuation of disease, both of mind and body. Reference must be made to the researches begun by Bouchard and first published by him in 1886 (*Union Médicale*), and continued and extended by many others, both in this country and abroad.

While there is still very much to be desired in regard to determining the exact source and nature of germ-processes, and germ and metabolic products, yet sufficient is known to make their existence and potency undoubted. The recognition of infectious agencies operating both from without and within, and of toxic products both from bacterial processes and metabolic changes, is radically changing the whole aspect of etiology and pathology, and must also bear fruit in the medical therapeutics of the future, as it has already done in the surgical therapeutics of the last two decades.

In diseases of the eye, autointoxication and auto- or endoinfection, have most important bearings upon etiology and treatment. Here, as elsewhere in the body, we must recognise two factors in disease. First, that unknown, but real, something which we call vitality, or vital power, or cell activity, of the parts, the loss of which means atrophy or death, the excess of which means hyperplasia, and the perversion of which means degeneration or neoplastic growth; second, a *materies morbi*, either chemical or living, in the presence of which cell life ceases, becomes perverted, or is over-active. Cell integrity, cell vigor, vital strength, is the greatest security to health. Whatever impairs this weakens the "defenses," and morbid agencies, otherwise inert, obtain a foothold. This cell vigor depends upon conditions of inheritance and of cell nutrition. The former are transmitted from parent to child, and the latter are influenced by a multitude of circumstances of nerve reactions, supply

of food and oxygen, free excretion, muscular activities and rest. In the former there is "robustness" of tissue and absence of disease. In the latter there are dyscrasias and an ever-present "morbid opportunity," in which morbid influences are not repelled and disease follows.

Thus the eye, with the body generally, may possess an inherent "vital strength" which defies even extraordinary morbid agencies: or, on the other hand, it may scarcely have vital resources sufficient to resist the slightest extraneous influence. In considering diseases of the eye, then, etiologically or therapeutically, this question of tissue robustness or vital resistance, determined mainly by studying that of other parts of the body, is of greatest importance; for in no other way can we understand why the eyes of one person readily yield to endoinfection or to endogenetically derived poisons, while in those of another no effect whatever is apparent.

Among the diseases of the eye which can be clearly recognised as auto- or endoinfectious, are those due to syphilis, both acquired and congenital. What the infective material of syphilis is, has not yet been determined, but there is no reason to doubt its bacterial character. Whether secondary and tertiary manifestations of syphilis are directly due to the same germ as the primary ones, or whether they arise from some peculiar toxins derived from the activities of the supposed bacterial germs in the primary disease cannot yet be determined. But whatever be the agent, the eye, under suitable conditions of vital nonresistance, becomes a favorite soil for its operations. Affections of the eye are seen in the secondary stages of syphilis in the form of acute inflammation, especially of the iris, ciliary body and choroid, and sometimes, but usually later, of the retina, cornea and sclera. In the tertiary stages there are chronic inflammations of the choroid, retina and other tissues of the ball, and gummatous infiltrations of the iris and other structures, and also atrophies and paralyses of the optic and motor nerves, found in connection with cerebral and spinal sclerosis. In inherited syphilis, it is not possible that syphilitic germs, if they exist, can be transmitted from parent to offspring; but a lowered tissue vitality is transmitted, and the eye structures are easily affected by certain toxins and infections, whereby interstitial keratitis, and chronic inflammation of the inner structures of the eye frequently develop.

Tuberculosis is another endoinfectious disease of the eye, and may attack any part; but it is seen most frequently in the choroid. The

agent of infection is well known, and the process well illustrates what may happen, in a modified form, in other endoinfections of the eye, such as those arising from influenza, leprosy, variola, measles, and the like. Septic endoinfection of the eye may occur in pyemia, the septic fevers and so forth, causing purulent inflammations and even panophthalmitis. Many other illustrations of undoubted ocular endoinfection might be cited, but the above are sufficient for the present purpose.

Let us now for a moment, turn our attention to some of the autointoxications, or those diseases in which there is evident poisoning by reason of the excess of some normal tissue-product, or the presence of some abnormal substance generated somewhere within the body. Uricacidemia is perhaps a pertinent illustration of an excess of a normal product. The accumulation of uric acid in the blood in abnormal quantity is believed by Haig, of England, and his adherents to be the cause of many of the ills to which human flesh is heir, and the eye does not escape its poisonous influence. An excess of the secretion of the thyroid gland, however this may occur, is now thought by many to be the essential factor in the production of that group of symptoms found in exophthalmic goitre, including the disturbances of vision, the protrusion of the eyeball, retraction of the upper lid, and the impairment of the winking reflex. In acromegaly, the question has been raised as to whether or not the hypertrophy of the pituitary body of the brain does not, in some way, influence some unknown secretory function by which certain bodily constituents are increased, and the peculiar physical abnormalities of the disease developed.

Other diseases are supposed to be caused by normal products, which are present in excess, because they are not chemically neutralised or disintegrated, as in Addison's disease, in which the adrenals have seemed to lose their function, or as in glycosuria; or because they are not sufficiently eliminated, as in nephritis, both acute and chronic, and diseases of the liver, etc. Abnormal products are formed in the body in many ways. But those which arise from the fermenting and putrifying changes common in the alimentary tract, and which develop in the course of infectious processes are of special significance. The intestinal ptomaines and toxalbumins are now believed to be a prolific source of very many nervous and psychic disturbances. In tetanus, it is well-established that a most virulent poison is generated, and it has been estimated that 1-350 of a grain is sufficient to kill a man. It is undoubtedly a product of this kind

which causes those manifold sequelæ of diphtheria, including the ocular paralyses. In typhoid fever another poison is evolved which, presumably, is the direct cause of the delirium and many other symptoms, and sometimes, also, of affections of the eyes. The same may be said, with confidence, of pneumonia and its casual infection. Rheumatism and gout are believed to be manifestations of autointoxication, either from some retained metabolic product or from some abnormally derived substance, or perhaps both.

To revert now more specifically to the eye itself, I assert that scarcely a disease of this organ, at least of an inflammatory character, can be named in which the cause, when not due to mechanical injury or to direct, exoinfection, does not lie either in autointoxication or endo- (auto-) infection. Take for example, iritis. The infection of syphilis, or the toxic agent of rheumatism and gout account for it in most cases. In other cases in which it seems to occur spontaneously the vital resistance of the iris may have been lowered by exposure to cold or by some dyscrasia, and then some toxin in the blood may determine an inflammation. Tenonitis is purely akin to rheumatism, and is due to the same morbid agent. The choroid, in its vascularity, is exposed to the same toxic and infective invasions as the iris and choroiditis is a frequent disease. Retinitis may always be regarded as due to some poison in the blood, whether it be from albuminuria, diabetes, syphilis, leukemia, pernicious anemia or arrested menstruation. Again, optic neuritis, both in its papillary and retro-bulbar forms, is distinctly a toxic affection. The most common form of optic neuritis is that seen in connection with intracranial growths and inflammations. There is but one theory which to my mind accounts for this disease, and that is, that a toxin is developed during the progress of an intracranial growth or a cerebral inflammation which is carried to the nerve through the various spaces and lymph-channels related to it, and causes the inflammatory reaction.

It is well known that nicotine and alcohol often produce retro-bulbar optic neuritis; and is it to be presumed that, when these are not operative, it may be caused by other toxic principles, the identity of which future researches will reveal?

Finally, I believe, with Professor Panas, of Paris, that sympathetic ophthalmia furnishes another illustration of autoinfection or auto-intoxication, not in the sense that it is a migratory disease in which germs are transported from the injured to the sound eye, as Deutschmann vainly endeavored to prove experimentally, but in the

sense that the uveal tract of the sound eye, by reason of a lowering of its vital tone through the extreme reflex and vaso-motor disturbances kept up by a foreign body in, or injury to, the other eye, becomes truly poisoned or infected by materials in the general circulation to the extent of inducing a most obstinate and uncontrollable inflammation. More than half a century ago, that great pioneer in ophthalmic research, Mackenzie, of Glasgow, advanced the reflex theory of sympathetic ophthalmia. But it has hardly been deemed sufficient to account for all the phenomena of the disease. But to this, add autoinfection of the parts whose vital defenses have been withdrawn by the reflex disturbance, and we have, it seems to me, a full and rational explanation of the cause of this disease.

Without extending illustrations further, I will conclude by adding that while we are but on the threshold of an understanding of autointoxication and autoinfection, yet I believe that we have advanced far enough to gain a glimpse of their verities and their import in the prevention and treatment of disease. By determining their origin and nature means will be found by which to avoid them or to destroy them, and the causes of very many diseases will thus be removed. In therapeutics, also, I believe much will be accomplished when we learn how to eliminate or antidote these poisons.

Admitting the infectious and toxic origin of a large range of diseases, perhaps a large majority, from which no organ of the body would seem to be exempt, the ophthalmologist, otologist, neurologist, gynecologist, surgeon and physician are all, alike, relegated to one common field of study and research and with the one common purpose of seeking and removing or making inoperative the causes of disease.

212 FRANKLIN STREET.

THE HYGIENE OF THE ASTHMATIC.¹

By GEORGE N. JACK, M. D., Depew, N. Y.

LAST December I read a paper before this Academy, entitled Abnormalities of the blood—the etiology of asthma. That paper furnished ample proof that asthma is a disease due to an abnormal blood biochemistry, which impairs its oxygenation; that the nerves and lungs take no part in its etiology, other than the performance of a physiological duty; and that the blood dyscrasias,

1. Read at the Buffalo Academy of Medicine, November 14, 1899.

either singly or collectively, that figure most prominently in its etiology are the anemic, the leukemic and the lithemic. It was understood that these terms were used only in a comparative sense for the want of a more definite phraseology, and they are named in the order of their importance. Or, in other words, it was shown that the abnormal blood biochemistry that produced asthma was usually associated with anemia, less frequently with leukemia and occasionally with lithemia.

The object, then, of a special hygiene for the asthmatic is to encourage such a mode of life as will tend to procure and maintain a normal blood biochemistry. This makes it an exceedingly interesting, delicate and difficult subject. Difficult, because there is no recognised literature on the subject. Interesting, because it has, in the hands of quacks and advertised physicians, contributed largely to the production of permanent cures of thousands of suffering asthmatics, while the regular profession has been compelled to dispute the cures, or behold them with bewildered amazement. Delicate, because it deals with a most accurate, sensitive, definite and automatic, chemical and electrical phenomenon, a chemistry of life that beguiles imagination, defies demonstration and discourages imitation.

It is not the intention of this paper to mystify, theorise, nor idly speculate; but it is hoped rather that it may deal exclusively with a few well-established facts in such a manner, that the medical profession at large may be able to cope with the advertising physician in the treatment of the asthmatic.

In order to appreciate the logic of this paper, it will be necessary to briefly consider the blood in regard to its functions and also its chemico-physical and magnetic-electrical properties.

These functions and properties you are all familiar with, but those to be emphasised here are: (1) That it is a very delicate and sensitive substance of complex and varied functions; (2) That it is continually undergoing chemical changes, whose reactions are produced by the acid, alkaline and neutral fluids of the body, plus light, oxygen and the electricity of life; (3) That all foods that are assimilated, directly enter the blood, as chyle, and are immediately carried to the lungs for oxygenation.

Guided by these facts and schooled by experience, we can never fail to appreciate the value of a hygiene for the asthmatic. And the subjects that are of special interest and have immediate bearing upon this matter are, diet, habits, baths, light, altitude and location.

DIET.

No disease in the domain of medicine is more benefited by a proper diet, or aggravated by an improper one, than asthma. Foods entering the blood as they do almost immediately after ingestion, as chyle, do necessarily and almost directly generate and constitute it. This is beautifully illustrated by the vicious circle of asthma which is, indigestion, intestinal toxemia, impoverished blood, impaired oxygenation, asthma.

Occasionally the abnormal blood biochemistry and its resultant impaired oxygenation, seem to precede the indigestion and intestinal toxemia, especially when due to the plasmodium malaria, but in most cases the vicious circle begins with the indigestion and intestinal toxemia.

In selecting a diet for the asthmatic, then, the crowning effort should ever be to choose such foods as are most rapidly assimilated and readily oxygenated. The food that has the greatest affinity for oxygen is blood, freshly drawn from the normal channels of a living animal. In fact, normal living blood's affinity for oxygen is so great that it is instantaneously altered by its presence, which renders the obtaining of it as a food for all asthmatics impractical, but it is in accordance with good logic to adopt as a diet its next of kin, which undoubtedly is fresh, rare beef-steak or roast.

Having an impoverished blood and knowing what constitutes its deficiency, it theoretically would be an easy matter to prescribe a food that would exactly counterbalance this deficiency, but practically it is a rather difficult undertaking, for we cannot alone take into consideration the deficiency of the blood and the foods containing this deficiency. Each case is a law unto itself and demands as a basic principle of treatment individualisation. No two patients are alike, either in the details of the disease, or in their customs, habits, constitutions, or chemistry of nutrition. Yet a rational diet for the asthmatic through our more accurate and complete knowledge of the nature of the affection, of digestion, nutrition, and of the various foods, is today possible.

In most asthmatic cases the chronic inanition is due to deficient alimentation, the diet being too exclusive or too reduced in quantity through fear or ignorance. After a meal rich in proteids the digestion leucocytosis, in the beginning of a course of enforced feeding, will increase the dyspnea after meals, but the blood is soon so altered and strengthened that the digestion leucocytosis is not noticed.

This digestion leucocytosis and its resultant increased dyspnea is the father of the popular, but decidedly erroneous idea that the

asthmatic must starve. The blood being already so greatly impoverished that it cannot absorb or carry sufficient oxygen is temporarily rendered worse, diluted and more work thrown upon it by the addition of modified foods or chyle. Therefore the rational and only way to fan this impoverished blood back to its normal standard is by the graduated and frequent ingestion of foods rich in albumin and blood elements, as meats. I claim for a fresh, rare beefsteak or roast diet with fresh fruits, that it not only directly generates a blood favorable to oxygenation, but also one that is unfavorable to the osmotic outpouring of mucus, so characteristic in the asthmatic.

There is some connection between eosinophilia and asthma, but what and how have never been explained. But a point in favor of enforced proteid feeding of the asthmatic lies in the fact that the polymorphonuclear cells and eosinophiles are increased in chronic starvation and that the eosinophiles are diminished during digestion. There is also some connection between leukemia, leucocytosis and asthma, but the fact that herbivorous animals, and presumably vegetarians are exempt from the physiological leucocytosis of digestion is no more of an argument against the proteid diet for the asthmatic than it would be to argue that a boiler running with deficient steam should not have this deficiency increased by the abstraction of heat following the addition of fresh fuel. So also as fuel added to a low fire produces more smoke and less heat than when added to a hot one, does food call forth a greater leucocytosis in proportion to its novelty in the stomach. It is advisable, then, to change the accustomed diet, though it be improper, slowly and tentatively. Changes, and great changes, may be necessary, but they should be gradual and proportionate to the patient's power of adaptation.

It is my custom to begin enforced feeding through the progressive diet constructed by Leube, which is as follows: (1) Bouillon, Leube-Rosenthal meat solution; milk; soft-boiled or raw eggs; dry toast or crackers; water or neutral indifferent effervescent (Co₂) water. (2) Boiled calf's brains; boiled sweet-bread; (thymus of calf) boiled young chicken; boiled squab cereal soups; tapioca cooked in milk; boiled calfs' feet. (3) Sirloin pulp steak; grilled sirloin steak; scraped raw ham; mashed potatoes, baked with a little milk and butter; a little white bread; cup of hot water with milk and salt. (4) Roast beef; roast chicken; venison; partridge and veal; boiled lean fish; macaroni; bouillon or rice soup; spinach; a little wine. (5) Baked apple; all common foods; finally, salads, vegetables and stewed fruits.

Clinically, if not scientifically, the correctness of this diet rapidly proved itself, in that it is soon borne with ease, comfort and increased health by old asthmatics who have for years through fear of digestion, dyspnea and flatulency actually fasted. The hot water, salted with a teaspoonful of milk, furnishes an excellent substitute for tea and coffee. It supplies the necessary heat to stimulate digestion and the salt acts as a powerful and natural intestinal antiseptic.

The efficiency of sodium chloride, common table salt, in the prevention of putrefaction and decomposition is most strikingly demonstrated through the common practice of preserving animal and vegetable matter by salting. It is well ever to encourage the free use of fruits, rich in organic acids, such as lemons, sour cherries, vinegar pickles, sour apples, sour oranges and grapes. These acid fruits have a double action. They preserve the normal chemistry of the fluids of the body and also the equilibrium of digestion through their laxative properties. The value of fresh acid fruits in the maintenance of a normal blood is often and forcibly demonstrated by the occurrence of scurvy in cases where they cannot be obtained, as on board of ships and in prisons. Foods rich in alkalies must also be given freely, not so much for their solvent effect on uric acid as has heretofore been taught, but because alkalies and the normal alkalinity of the blood constitutes the basic principle of its oxygenation. The diet of the asthmatic should be varied and abundant. He should make eating his chief aim in life. Eat slowly, frequently, much, and a variety.

BATHS.

Hydrotherapy ranks next in importance to diet. In fact it is safe to base the prognosis of an asthmatic case on the probable efficiency of its hydrotherapy. In cases that cannot for any reason, as fear, dread, ignorance or physical peculiarities avail themselves of these hydiatic procedures, the prognosis is grave. While in intelligent cases that are thoroughly convinced of the importance of hydrotherapy and the prospects are that it will be practised as ordered, the prognosis is good. There is no organ, tissue or substance in the body of an asthmatic that is not greatly and directly benefited by a proper system of cold water baths. The blood, though, is the substance most altered by cold water baths, and it is through this altered blood that the asthmatic derives the most of his benefit. Cold water baths and altitude exert a similar influence over the blood. That the curative effect of cold water sponges is due to an alteration of the blood has often been proven.

Knöpfelmacher has found immediately following cold water baths, given from ten to twelve minutes at a temperature of sixty-two to seventy-five degrees, that the blood cells rapidly increased in number. The increase began two minutes after the bath was entered. The maximum increase was 30 per cent. A diminution ensued in half an hour. The hemoglobin and specific gravity of the blood were in agreement with this result. Theoretically this increase in the cellular elements of the blood, which are the carriers of oxygen and carbonic oxide should have a decided therapeutic effect upon the dyspnea, and clinically the correctness of this theory is most forcibly demonstrated by the fact that an asthmatic may be suffering with agonising dyspnea that will disappear like magic in a bath tub of cold water. How cold water baths increase the cellular elements of the blood and thus its oxygen-carrying power is at present a disputed question, but that the blood cells are increased by cold water baths is conceded by all.

Winternitz claims that the effects are due to changes produced in the circulation through the increased action of the heart, tone of the vessels and tissues which drive the blood cells from organs in which stasis and accumulation of red and white blood cells have occurred. There have been many theories advanced to explain this increase in number of the corpuscular elements under the influence of cold, but the most rational explanation seems to be that offered by Winternitz, for this increase in the blood cells following cold water baths is too immediate to be due to the generation of new cells. Cold water baths improve the oxygen absorbing and carrying properties of the blood, not alone by the increase in the blood corpuscles, but also by beneficial changes in its chemical constituents.

Strasser has shown that after cold procedures the relative quantity of acid phosphate was diminished, and the alkalinity of the blood increased. Thus daily cold water baths will do much to create and maintain a normal blood, both as regards its alkalinity and corpuscular count, either of which is absolutely necessary for its perfect oxygenation.

A great deal of tact is necessary in prescribing this treatment for the asthmatic, as he has an inborn dread and fear of cold water, and the physician who simply tells his asthmatic patient to take a cold water bath once a day will probably never know the results of his prescribed treatment. It is my custom to begin with salt rubs. I have the patient take two quarts of hot water and make a saturated salt solution, using coarse barrel salt, then

soak in this salt solution ten linen towels, about two and one-half feet long. After the towels are thoroughly saturated, hang, without wringing, and let them drain dry. This produces a rough salt towel with which I order the patient to rub himself for five minutes every morning for ten mornings. I then, in all allowable cases, order the cold water sponges.

It is necessary here to give very complete and careful directions to your patient. Patients should be instructed to obtain a large bathing sponge and half a dozen coarse Turkish towels. Then every morning on getting out of bed, they should run in the bath tub about four inches of warm water, at a temperature of about ninety degrees, stand in this and put the sponge in a large pail, run the pail full of cold water, or water at a temperature of about fifty-five, set the pail down in the tub or some convenient place, grasp the sponge and clasp it to the chest, letting cold water run down over abdomen, soak the sponge again and clasp it to the back, letting water run down the spine; sponge the arms and legs; jump out of the tub, take one towel and rub the water off the body, then take another dry towel and rub briskly for five minutes. These friction rubs, following the cold water, produce a delightful reaction and the patient will not need much urging to continue the process. After a few mornings the patient will usually voluntarily discontinue the hot water in bottom of tub and take a clear cold water sponge, in the manner above described.

LIGHT.

Fuller has discovered remarkable changes produced by light upon the composition of the blood. What these changes are I do not know, but I am thoroughly convinced that sunlight has a most decided effect over the blood of the asthmatic. I believe that it is for the want of the chemical influence of sunlight that most asthmatics have their attacks during the night. The power of sunlight as a chemical agent is beautifully illustrated in photography and also in the chlorophyll of plants growing without its influence. The chemical effect of sunlight on the blood is shown clinically by the fact that an asthmatic may suffer during the night with agonising dyspnea that immediately disappears in the morning upon getting a sun bath. The absence of the effect of sunlight on the blood of the asthmatic often proves to be the last straw in the production of an attack. Sunlight can be advantageously utilised in the hygiene of the asthmatic by choosing for him a sunny room in a sunny country.

The friction rubs and baths before mentioned should be taken in a room well lighted by day or sunlight and when possible under the direct solar rays. By thus taking these baths and friction rubs under the direct or indirect influence of the solar rays, we expose the entire surface of the body to light's action, and as a result obtain nearly double the alterative effect on the blood that would be obtained were these baths and rubs taken at night or in a dark room, as a poorly lighted basement. During these light exposures the temperature should not exceed sixty or seventy degrees, as excessive heat is debilitating to the blood. For this reason it is well to choose the morning hours for these combined cold water friction rubs and light baths.

ALTITUDE.

It has long been known that high altitudes exerted over the asthmatic a favorable influence, but how it did this was never until recently discovered. There remains no doubt now, however, but that the benefit is directly due to the immediate increase in the number of red blood corpuscles. This polycythemia increases the higher one goes.

Vialt has found an increase from 4,974,000 red cells at sea level to 8,000,000 at an altitude of 14,224 feet. Old asthmatics who have long resided at or about the sea level, and though they may have had asthma in its severest forms for years there, are on ascending to high altitudes, as in the mountains of Colorado, instantaneously relieved and temporarily cured. It is not practical to utilise the beneficial influence of altitude as a hygienic principle in the treatment of all asthmatics, but it can be advantageously used in the treatment of those who might for any reason prefer it to drugs. Asthmatics, though, who rely on altitude alone as a cure, usually fail. The cure is successful enough while they continue to live at a high altitude, but on resuming their former sea level residence, their asthma is quite apt to return. This returning of asthma at sea level can, however, in time and by the observance of proper hygienic measures, be in most cases, prevented, and the altitude cure made effectual and permanent, thus robbing this cure of a popular prejudice that all those who avail themselves of it must become exiles from home. The requisite hygienic reform should begin during the altitude sojourn and be continued at the sea level abode.

HABITS.

There is no class of people more prone to habit than the asthmatic. Physicians not knowing the nature of the disease have tried one

drug after another, until his victim either died, deserted or accidentally became cured. If the latter, the physician would declare the drug he was using when this accident occurred, to be a specific, and all of his asthmatic patients were put on this supposed specific and continued thereon till they had a drug habit. The habit affliction, though, is not alone imposed by the physician, for each and every grandparent, uncle, aunt and friend of the asthmatic have a sure cure that must be faithfully tried.

What wonder, then, that the asthmatic becomes a bundle of habits that collectively or individually are his enemies. Tobacco and alcohol are the two habits that are most usually found associated with the asthmatic, and I believe they should be strictly interdicted. Alcohol, during severe asthmatic seizures can be advantageously used, but its habitual or accustomed use at other times should never be tolerated. Tobacco should never be allowed in any form or at any time. It is quite true that tobacco, when pushed to its physiological limits will in an asthmatic, when unaccustomed to its use, produce temporary relief, if given during a severe attack. But this relief is purchased by an extravagant expenditure of blood recuperating power of which the asthmatic has none to spare, and it is followed by such a debilitating condition as faintness, giddiness, nausea and vomiting, cardialgia, torpor, sleepiness, palpitation of the heart, hypochondriasis, amblyopia, general relaxation of the muscular system, trembling, complete prostration of strength, coldness of the surface, cold clammy perspiration and convulsive movements. These symptoms, one and all, have been experienced by every tobacco smoker.

Marable, in an excellent paper on tobacco, quotes Dudley, who has shown by experiments that when there is a layer of fire, one sixty-fourth to one-sixteenth of an inch in thickness as the air is drawn through the hot carbon, this is reduced to carbon monoxide and as such is drawn into the mouth, for when it passes beyond the fire there is no air or oxygen to convert it back to carbon dioxide. Its well-known poisonous effects when inhaled are the results of its affinity for the hemoglobin of the blood, converting the oxyhemoglobin into the carbonic oxid hemoglobin, a stable compound not reduced in the circulation, hence producing permanent asphyxia. Gas, smoke and all the results of combustion are the end products of oxygenation, and are therefore directly poisonous to it, as are the end products of any of nature's phenomena directly poisonous to a second production of those phenomena.

In consideration of these simple facts it seems strange that the medical profession, with their superabundance of knowledge, should continue to wonder whether or not tobacco smoke is detrimental to mankind, and ever poison themselves and their patients with the end products of oxygenation, thus crippling one of life's most vital functions.

In those who have a healthy vigorous blood that rapidly absorbs and readily carries oxygen, the impaired oxygenation resulting from tobacco smoke will hardly be noticed, but with the asthmatic it is the last straw and must be strictly prohibited.

LOCATION.

I believe that most asthmatics can be cured in any country or clime by a proper use of drugs and hygienic procedures. But altitude and location may in a vast majority of cases be advantageously substituted for drugs. The main object, other than altitude, in choosing a location for an asthmatic is to avoid malarial districts, for there is no disease more destructive to the cellular constituents of the blood, or that better paves the way for asthmatic seizures than malaria. The asthmatic, then, must either avoid malarial districts or be compelled to occasionally resort to an anti-malarial treatment.

Many authorities have shown, without attempting an explanation, that the country bred asthmatic was greatly benefited, if not entirely cured, on assuming a city abode. This statement can now be followed by a rational explanation for the benefit the asthmatic derives from a city life is most decidedly due to the fact that our modern cities are, as a rule, exempt from malarial infections.

This completes the hygienic circle of the asthmatic and proves that circle theoretically, scientifically, practically and clinically to be diet, baths, habits, location, polycythemia and health.

SOME OF THE CAUSES AND EFFECTS OF MOUTH BREATHING.

By J. M. INGERSOLL, M. D., Rochester, N. Y.

IT IS not my intention to try to enter into an exhaustive and technical discussion of this subject, both from lack of time and a feeling that such a presentation would be presumptive and out of place during such a busy session as this one will be. I shall try to

1. Read at the thirty-second annual meeting of the Medical Association of Central New York, at Syracuse, October 17, 1899.

present to you some of these forms of obstruction to nasal breathing that are most commonly met, and which the general practitioner is called upon to diagnosticate.

This subject should attract the attention of every practitioner of medicine, because through the family physician many persons may be saved the suffering and deformity due to causes easily removed. The general practitioner owes it to the families he attends, to avert the pernicious effects of obstruction to free nasal respiration in the children growing up under his professional care. Too often is the condition allowed to persist until an evil is created that can never be completely remedied; and I believe that a physician who allows such a condition of things to continue, is derelict in his duty to his patient.

This is especially true of the first cause of mouth-breathing which I shall consider—adenoid growths or vegetations in the nasopharynx. I have known cases of this disease to be neglected because the family physician has said, when consulted about the condition of the child, "Oh, let them alone, the child will outgrow them, and they will disappear." There is just enough truth in this assertion to make it especially dangerous. The child *will* often outgrow them, and they *will* disappear, but, by the time this disappearance has taken place, the child is marked for life.

In children from infancy to the age of seventeen these growths are probably the commonest cause of mouth-breathing, and perhaps the most important of all, because they do occur so frequently in young children. They are, I believe, far commoner than most of us are apt to suspect. They are found in very young, as well as in patients of mature age. Bosworth gives two tables containing analyses of the ages of patients in which these growths were found.

The first is by Meyer, who first called the attention of the profession to these as distinctive growths, showing that the cases ranged in age from under 5 years to 45, and that out of 102 cases, 34 were in patients between 5 and 10 years of age; 25 between 10 and 15 years; 21 between 15 and 20 years, and 11 between 20 and 25 years; only three cases occurring in children under 5 years of age. Bosworth's own tabulated cases were 75 in number, of which only 5 were under 10 years, 16 between 10 and 15 years, 27 between 15 and 20 years, and 23 between 20 and 30 years. The others were in patients up to 50 years of age.

In explanation of the difference in the average ages of his and Meyer's patients, Bosworth says that he includes in his tables the

cases of broad flat growths occurring in the pharyngeal vaults of adult patients, as he considers them essentially the same as the growths in children. In this I agree with him.

In my own experience I have found a larger proportion of cases in children under 5 years than either of these tables show, and I believe the reason is that the general profession is more observant of these cases than in the past, and has patients treated much earlier in life. The cause of adenoids is still undetermined, but it is observed that they are likely to occur, and are more largely developed in children of "scrofulous diathesis," but all the late writers seem to think that scrofula, *per se*, is not the direct cause. That there is hereditary tendency would seem to be indicated by the frequency of several cases occurring in the same family, with at least one of the parents bearing signs of a similar trouble in former years. The so-called lymphatic tendency is observed in a great number of cases, the faucial tonsils and cervical glands being involved in the hypertrophic condition.

The diagnosis of this condition is easy, especially in persons past the period of inarticulation. The voice alone should lead one to suspect the presence of these growths. There is a "dead" quality to the tones; a lack of resonance, which can be due only to some form of nasal obstruction. The symptom, however, which never should fail to call attention to these parts is mouth-breathing. When you observe this symptom in any of your young patients examine for a nasopharyngeal space filled with adenoids, as this condition is most probably present. The nose is primarily an organ of respiration, and a child will always use it as such, unless there is some mechanical obstruction present, when, of course, mouth-breathing must be resorted to, in which case an examination of the nose and pharynx is imperatively demanded. If the patient is old enough a rhinoscopic examination will reveal the condition, and frequently an examination through the nose will establish the diagnosis. The finger in the nasopharynx is an unfailing index, and should always be used in case of doubt.

Nasal stenosis and consequent mouth-breathing may be caused by the presence of hypertrophied lingual tonsils. These tonsils are usually concurrent with adenoid vegetations, but are frequently present without adenoids. A visible tonsil is always an evidence of diseased action, and when large enough to cause trouble should be attended to. I have entirely relieved several cases of mouth-breathing by the removal of enlarged tonsils. Prominent among cases of

obstruction to the nasal passages is that form of growth called polypus. It is a common cause of stenosis, discomfort and pain. The diagnosis is easy as these growths are usually in a position to be plainly seen, having their origin, as a rule, on the second turbinate bone. In any adult, having a characteristic dead, flat voice, "talking through his nose" (which he is not) always suspect the presence of nasal polypi. They are usually bilateral, but occasionally occur in one side only. Other causes of mouth-breathing are spurs of the nasal septum, deviations of the nasal septum, hypertrophies of the turbinated bodies, cysts of the turbinated bodies, especially the second turbinate, rhinoliths, papilloma, and other rarer forms of deformity and disease.

The evil effects of mouth-breathing are many and wide-spread. First, as to its bearing on anatomical development. A person who has been an habitual mouth-breather from childhood presents a very characteristic appearance, due to the interference with development of the facial bones, from non use of the nose in respiration. The face is long, narrow and flat, the nostrils usually mere slits, lower jaw protruding and drooping, giving a stupid expression to the face. On inspection of the mouth, the arch of the hard palate is seen to be very high and narrow, and the teeth in the upper jaw are very irregular, so much so that many adults have had numbers of teeth drawn to "make room," and not a few have been obliged to have all the teeth drawn, and wear a plate, so uncomfortable and unsightly were their own teeth. This comes from the nondevelopment of the superior maxillary, producing what is often called "dish face."

Aside from anatomical defects, the physiological effects are decidedly injurious. The tongue, cheeks, pharynx and larynx are injuriously affected. During respiration the inspired air should be warmed and moistened before reaching the pharynx, larynx and lungs. In normal respiration this object is attained by the passage of the air through the nose, where it is properly prepared for the further use in the lungs. When, however, nasal respiration is impossible, moisture is snatched from the tongue, cheeks, pharynx and larynx, which are not supplied with the proper apparatus to furnish it. As a consequence these structures are kept in a state of chronic inflammation, which aside from any remote injurious effects, causes great discomfort, and often pain to the unfortunate mouth-breather. The mental processes of mouth-breathers are slow. Especially is this noticed in the morning after the unfortunate has spent a night of heavy, but unrefreshing sleep. He awakens, or is awakened, with a

decided feeling of drowsiness, and has a well marked case of "that tired feeling," which, however, Hoods' sarsaparilla would never cure. His tongue is parched, cheeks dry, pharynx coated with a thick, sticky mucus, which has given up all the moisture that can be extracted from it. His eyes seem glued together, "just one more nap" seems most desirable, and when compelled to get up, he feels as if his sleep had not been refreshing. In fact, he does not begin to feel "like himself" until he has been up for some time, and gotten his blood into active circulation.

No mouth-breather is healthy. There is no one disease which can be diagnosticated, but there is a feeling of languor, a lack of endurance, often a functional heart trouble, and a general lack of ambition. Vague symptoms are noticed, and are referred to many causes. Backache, the effective coadjutor of quack kidney remedies, is a common sequence of mouth-breathing, due to the lack of rest during sleep. These symptoms usually disappear or grow less marked as the day progresses, and the patient may feel quite well during the afternoon or evening. These bad symptoms are invariably relieved by the removal of the obstruction to nasal breathing and the resumption of the physiological function of the nose.

In addition to the more direct results due to the mouth-breathing of children, in whom adenoids are present, deafness, more or less marked, is commonly noticed. This affliction causes them to become inattentive, and unjustly stamps them with stupidity, when proper attention to their condition, with appropriate treatment, would save them much humiliation. Mention here of the treatment of the various conditions described is hardly necessary. The indication is for the removal of the obstruction, of whatever nature, but a description of the technique would make this paper too long, and take up your time unnecessarily.

ON THE RESUSCITATION OF APPARENTLY DEAD NEWBORN BY LABORDE'S METHOD.¹

By FRANCIS EUSTACE FRONCZAK, A. M., M. D., Buffalo, N. Y.

ON JULY 5, 1892, Prof. Laborde communicated to the Paris Academy of Medicine a new method of resuscitating the apparently dead, by a method called by him, "the rhythmic traction of the tongue." This method, as we see by the name, consists in

1. Read at the thirty-second annual meeting of the Medical Association of Central New York, at Syracuse, October 17, 1899.

the rhythmic traction of the tongue by two fingers covered by ordinary cotton or a handkerchief. The traction being at the respiratory rate of 18-20 per minute in adult, a little more rapid in the new-born.

The author explains the success of this method by saying that the action results in a reflex irritation, which is referred to the respiratory center through the motions at the base of the tongue, the nerves which respond being the superior laryngeal, glosso-pharyngeal, the lingual and finally the phrenic. The method was first used exclusively, and even now is used by the majority of the profession in resuscitating those who stop breathing under chloroform, the drowned, the would-be suicides by hanging, and later has been used successfully in asphyxia neonatorum. I propose to quote several cases where this method gave gratifying results. It was some time before Laborde was able to arouse any attention for his method. For a long time he collected statistics and reports of cases bearing on this mode of reviving the apparently dead. The German obstetricians ridiculed the method and for a time it appeared that Laborde's labor would be in vain. Now, however, as we can see from quite a number of reported cases, the method is being brought more into vogue, and is gaining a well-deserved reputation and I believe is bound to stay.

As you know, by asphyxia neonatorum, we understand that condition where the newborn does not make any respiratory movements, notwithstanding the pulsation of the heart and of the cord more or less vigorously. We differentiate two degrees of apparent death of the newborn, the livid or lesser degree, where the skin is dusky, cyanotic, the cardiac and umbilical pulsations, though slow, are quite forcible, and reflex movements are easily produced by irritation of the skin; the pallid, or greater degree of asphyxia, where the heart beats are very feeble and the pulsations of the cord is either almost or quite imperceptible. The child is pale and no reflex movement of any kind is possible.

It is outside my limits to speak of the etiology of this suspended animation of the newborn, sufficient for me to say that the essential cause of it, in my opinion, is not only the interference with placental circulation, but also various other causes, in my experience forceps being among these most common, and where the asphyxia is most prominent, this latter being due to the stoppage of return circulation from the brain of the child, with the resulting engorgement of the cerebral cortical vessels and rupture of these vessels into the brain tissue.

I shall only mention the other various methods of treatment of asphyxia neonatorum, so well known to you, the Hall, the Sylvester, the Schultze, the mouth to mouth insufflation, the chest compression, the Prochownik feet suspension, the Brown injection of brandy, the Cooke insertion of finger into rectum, and the many other things which have been proposed from time to time by various observers and real students of their surroundings, and the means of adapting them to their needs. As a rule, by far the greatest number use Schultze's method, which, we must admit, is most ingenious and feasible, as it answers the purpose in removing the foreign bodies from the respiratory tract, bringing about artificial respiration and most efficiently aids the circulation of the blood in the newborn. Yet this very commonly practised method has several things against its use. It is, in the first place, very tiresome to the person using it; secondly, it cannot be used where there is a fracture of the clavicle, as it may injure the pleura, or even penetrate the lung, though Schultze says that by proper use of this method there is no danger in using it in this fracture; third, it can hardly be used if there is a fracture of any of the extremities, either hand or leg, and we all know such fractures can occur in the practice of even the most experienced and careful obstetrician; fourth, this method does not give good results in prematurely born children; and fifth, those here present who practise among the poorer classes, know full well that in our practice we find rooms where the ceilings are so low that it is almost impossible to stand erect, much less to use Schultze's method of resuscitation of the newborn.

Schultze's method of swinging the child, requires a certain technique, which is seldom learned by the midwives; the fact is I have never seen a midwife perform these movements properly.

Now, Laborde's method does not have any of these faults which I have mentioned, but on the other hand has several points in its favor. The question may arise, can we resuscitate the newborn by the Laborde method as well as by the Schultze method? I believe there is no doubt in any one's mind here present, that in a mild degree of asphyxia neonatorum, where the sprinkling of the child with cold water will bring about the respiratory movement, Laborde's method will also give good results, but will the rhythmic traction of the tongue resuscitate a child apparently dead and in deep asphyxia, is a question which theoretically can be answered in the affirmative, and practically it has been proven to be so.

Schultze, himself, in an article in which he points to the mistakes

made in the application of his method admits the feasibility of Laborde's method in mild and even in certain greater degrees of asphyxia, but he doubts if the French mode of resuscitating can be applied in very deep asphyxia, where there is no pulsation of the heart or cord, unless his (Schultze's) or some other method be used at the same time. Permit me, however, to quote a few cases in my practice, in which this theorised fear of Schultze's did not materialise, and Laborde's method held its own :

Case I.—Called by midwife to a multipara; prolapse of the arm; version under chloroform; leg pulled down; all well until head, which seemed to be almost immovable. The newborn in deep asphyxia. Schultze method used, no results; Prochownik's feet suspension—result negative; child put in warm bath and Laborde's rhythmic traction of the tongue at the rate of 25 per minute were made; after ten minutes child slowly revived.

Case II.—Multipara, transverse position; prolapse of cord; version; child born in deep asphyxia; sprinkling with cold water and putting child in warm bath gives negative results; pulsation of heart not apparent. With Laborde's method, at almost every traction of the tongue there was slight respiratory movement, which ceased as soon as tractions were stopped. After several minutes gradually the child began to breathe.

Case III.—Forceps case; child delivered in deep asphyxia; Schultze method, insufflation, feet suspension, warm bath and cold water sprinkling—all in vain; traction of the tongue at the rate of about twenty per minute, continued for about twenty minutes, child gradually began to breathe irregularly and spasmodically and finally regular breathing ensued. Woman in labor for three days.

Case IV.—Tedious delivery, high forceps, male child in deep asphyxia; Laborde method, tractions at the rate of about twenty-two per minute, with child in warm bath; after ten minutes child resuscitated.

These, in short, are a few cases in which the results are very positive. In each case the nose and mouth were cleared of mucus. Let me repeat, the Laborde technique. As I have said before it consists in tractions of the tongue by two fingers wrapped in cotton or handkerchief, with child in warm bath. As in all other methods of resuscitation of the newborn, do not lose courage if after several minutes there are no results or signs of breathing. The tongue at first will give no resistance, after awhile it resists positively, soon we notice very mild respiratory movement, then all is quiet. In a short time the breathing is stronger and has a normal character and

the child begins to cry, move, etc. Laborde's method is better than Schultze's because the child does not become chilled, being all the time in warm bath. We can notice the beating of the heart, do not tire ourselves as easily as in Schultze's method and can use it in cases where the latter mode of resuscitation is impossible.

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DISCUSSION.

Dr. SEARS, of Syracuse.—I was very much interested in Dr. Fronczak's paper and I think there are some very good points brought out there. The fact of putting the child in the warm bath while you are performing your other methods of resuscitation is an excellent idea in my experience, and any method which will allow you to do that is preferable to any method, I think, which will not allow you to do that. In speaking of forceps as being a cause perhaps of the asphyxia, I think that is very true. The only case that I have ever seen with a strong heart beat and yet without any respiration, was a case of prolonged forceps. I was called some to or three years ago with Dr. B. He had been at work a long time with the forceps in this case, and after I arrived it took a long time, until I was nearly exhausted, before we could deliver the child. In that child, I think the heart beat strong for nearly twenty minutes, and yet we could get no respirations with every method that we could try and the child died. The real actual cause I don't know, but it was the only case I have ever seen where, with good strong heart beats, you could not get any respiration.

There is another method which I have used. I don't know but others have used it also. In cases where a child will breathe fairly well and yet will have a blue condition, cold extremities and feet and hands will become blue at intervals and doesn't revive properly. In this case, I have used warm saline, with a few drops of whiskey or brandy in the rectum and they respond very nicely. Four or five drops of brandy, with a teaspoonful of warm saline solution in the rectum will revive a baby very nicely in those cases where you have feeble respirations and cold extremities and without proper circulation.

I am greatly indebted to Dr. Fronczak for this paper, as this method is comparatively new to me. I have not used the methods that he speaks of.

Dr. GABB.—I would like to know just what the process is to produce this condition. I have seen some children resuscitated and I have seen others die, but just what the *modus operandi* of this is, I am willing to say I don't understand.

Dr. FRONCZAK.—In answer to the first speaker, I would say that I have had two or three cases where the heart beat could be felt and seen and still the child did not revive. This contraction of the tongue, I will answer the Doctor, consists in taking the tongue and simply pulling it up and down at the rate of about twenty times per minute. That is the only thing he does to it. It seems to be so simple that I am surprised that the doctors expressed their idea of this being a new thing. I believe I am one of the first to use it in these cases in Buffalo. I had a case in the Penitentiary and I told my assistant to do that. He laughed at me. He said, "What good will that do?" It seemed to do some good, because the child revived.

CEPHALAGRA AND TIC-DOULOUREUX FROM ACCESSORY SINUS AFFECTION.

By SARGENT F. SNOW, M. D., Syracuse, N. Y.

THE sympathy and skill of the medical profession has been well tested in the effort to relieve severe paroxysms of cranial and facial pain. No cases appeal to us more than those afflicted with recurring attacks of cephalagra and tic-douloureux, hence I venture to assume that all medical men have more than a passing interest in those affections.

The many and varied analgesics have been tried and worn out, some leaving their imprints on an already weakened constitution, and some a pernicious habit; some perhaps useful in giving a temporary relief from the distressing pains, but all most unsatisfactory as curative agents, until we have dreaded to see these patients enter our office.

Modern research has brought us to a point where it is now quite generally conceded that there is no pain or neuralgia as a disease *per se*. There must be a primitive cause and it is in the search for these primitive causes that this paper is indited.

Two years ago when the American Rhinological, Laryngological and Otological Society met in Washington,¹ the reader had the honor to present a paper under the title of Headaches from nasal causes,

1. Read at the thirty-second annual meeting of the Medical Association of Central New York, at Syracuse, October 17, 1899.

in which thirty cases of the ordinary forms of headaches were reported. Seven claimed to have received relief to the extent of about 40 per cent.; five, 75 per cent.; ten, 90 per cent.; and eight, 100 per cent. from purely nasal work, all pointing most conclusively to the value of this form of treatment.

In this paper I hope to show my reasons for the opinion that we have just as good a right to expect like results in many extraordinary forms where the patients are even thrown into spasms from the severity of the cranial pain, or into the most intense agony by so-called tic-douloureux.

The connection between disordered states of the upper air-passages and cephalalgias is not so debatable now as in 1893, when a paper on Hemicrania and neuralgia,² by the author, was brought out. Several essays on headaches by well-known rhinologists have appeared during the past three years,³ and I expect the future will prove that others can report well authenticated cases of these more intense forms, for which I have chosen the terms cephalagra and tic-douloureux, and, perhaps, have already reported them.

I am not prepared to say that this is the first article calling attention to the relation of pressure within the accessory sinuses to these two troubles; but so far with the limited time and literature at my disposal, I have found no mention of these sources as a probable factor in their production; neither will I presume to say that sinus affections are the only causes of cephalagra and tic-douloureux, but I believe the future will prove that they are determining causes in 75 per cent. of all cases.

It is needless for me to go into detail and show how these reflexes are brought about. You all know the anatomy of the parts I speak of, and the extremely sensitive state a nerve will get into if subjected to severe or constant pressure. This condition of severe and often constant pressure obtains in many of these patients, sometimes from an acute retention of mucus or pus, sometimes from a collection of polyps within the antrum, ethmoid or sphenoidal sinuses.

The reason why collections of mucus, pus or polyps in these cavities cause these most severe paroxysms of headache and tic-douloureux in some, asthma or hay fever in others, and in still others only foul discharges, I will not attempt to explain, but will pass to some of the experiences that led to my present convictions.

About four years ago a relative who had been suffering with neuralgia of the fifth nerve for several months, submitted to an examination of the nose. I expected to find an enlargement suffi-

cient to cause the trouble, but to my disappointment none existed. There was some evidence of sensitive membranes, but no intranasal pressures, and I reluctantly had to refer the case back to the general practitioner. The extreme suffering continued in the manner typical of tic-douloureux until ten months ago when, having had a series of cases exhibiting the same symptoms, in whom I had found ethmoid trouble, I visited the patient with an idea of examining the adjacent sinuses and learned that two weeks previous, following months of acute suffering, there had been a sudden and unexpected relief. An examination at this time showed a nest of small pale tumors that had apparently just broken through the thin wall of bone separating the upper nasal fossa from the ethmoid cavities, and that is exactly what had occurred. The pent up polyps so long hidden had outgrown their habitat, burst its walls, relieving the pressure, and pain had ceased.

In this connection, I will briefly mention two more similar cases that have come under my notice and even now occasionally visit my office. Each of them had had teeth extracted; antimalarial medication, electricity in its various forms, and the best medical care, but with very little good effect, until as a last resort they were referred to a so-called nose specialist. One, a lady who for eight years had suffered in the most severe way, presented interesting features. It was found that the anterior end of the middle turbinate was much enlarged and grown to the septum. The removal of this enlargement was followed by considerable relief, but not the very marked and satisfactory outcome that followed a complete removal of the entire body opening into the ethmoids and clearing out the polyps in the middle and posterior cells.

The other lady, 62 years of age, was referred to me in much the same manner and suffering, if possible, more intensely. In moist weather she would have ten or twelve seizures a day lasting two minutes, and so severe she was compelled to scream and often go into spasms. This condition was continued with slight variation for fourteen years, never free from twitching pains in the face, nutrition had been seriously impaired for a long time, attempts to masticate food would bring on a paroxysm, compelling the frequent use of a feeding tube. Examination showed her face to be pale, moist and shiny, with marked swelling outward of the bridge of nose. The right middle turbinate body was of tremendous size, effectively blocking secretions; this was removed and the ethmoid region opened. The operation was followed by only about 50 per cent. relief, until two

months later I entered the posterior cells, curetted the degenerated membranes, and enlarged the sphenoidal opening with most beneficial results.

These abnormal states of the deep sinuses, varying as stated before from simple inflammation of their lining to collection of mucus, pus or polyps, obtain and are the cause of many of our cases of acute hemicrania that persist in some degree after a thorough removal of nasal overgrowths. Endo-ethmoidal or endo-sphenoidal pressures seem also to be a large factor in the cause of the paroxysmal headaches, termed cephalagras, which were mentioned in the early part of this paper.

A detailed recital of cases representing this class might weary you and I will only touch on two of the most extreme that have come to my notice. Both were ladies between thirty-five and forty years of age, giving a history of long and severe suffering from the head pains, so intense at or near the menstrual periods that coma and opisthotonos would supervene. In each there was marked uterine trouble co-existent with an intranasal and sinus affection. In one, the only attempt thus far has been toward an improved pelvic state, which has modified but never prevented the cephalagric seizures.

With the other case the obstructions were removed, good intranasal tone and drainage secured, and while these were maintained, none of the paroxysms recurred, but with each lighting up of the pelvic inflammation there was marked thickening of the nasal membranes and a strong tendency to headache, which would and did come unless the respiratory tract was kept free and toned up by treatment. Upon the advice of her physician, she submitted to an operation for the repair of a lacerated cervix and the benefit from our combined effort has been marked. He reports that the uterus has become smaller; there is good nasal respiration and drainage at all times with no tendency for headaches.

Such proofs as these, and the marked benefit that follows correction of intranasal states in patients who suffer with those common uterine symptoms, pain or pressure on the vertex, have a strong tendency to make the specialist extravagant in his claims. We don't know but that it will be found that an intermediate, removable nasal factor exists in all headaches (except, perhaps, the occipital), that are associated with pelvic disorders. To be more explicit: It seems that a deranged organic function with congestion, promotes thickening of the nasal membranes, so that surfaces abnormally close press upon each other, causing various reflex disturbances.

Every patient suffering from cephalagra or tic-douloureux does not show an intranasal growth, but, unsuspected, as in the one first mentioned, we may find an ethmoid full of polyps; neither do all cases respond promptly to operative procedures, doubtless because it is almost impossible to reach every region of pressure at one or two sittings. Further than that there may be some areas which we do not wish to meddle with, being of a less chronic order and which can be left for the improvement that follows removal of the worst features. Conservatism is commendable, if not carried too far, but it should be borne in mind, that only slight contact between surfaces may create a profound disturbance where nerves are in such a hypersensitive state.

I would especially emphasise the following observation, as it is one on which may hinge our ultimate success or failure, *i. e.*: Relapses may occur, as it is still possible for neighboring sinuses to become occluded if habits and environment remain unchanged, therefore education in personal hygiene is absolutely imperative, or we may have to be satisfied with modified results.

Digestive disorders, lack of exercise, or a sluggish surface reaction play an important part, and with each of these attacks, symptoms of the old trouble are liable to return; indeed, it is a revelation to see the increased thickness of the membranes, with consequent blocking of secretion, that occurs as the result of these states and no permanent benefit may come from their correction before nasal work, but after nasal work complete success is possible.

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- 204 EAST JEFFERSON STREET.

Society Proceedings.

BUFFALO ACADEMY OF MEDICINE.

Section on Medicine, Tuesday Evening, November 14, 1899.

REPORTED BY J. C. CLEMESHA, Secretary.

THE Medical Section of the Academy of Medicine held its second regular meeting in the Academy parlors, November 14, 1899. Meeting called to order at 8.30 p. m., Dr. E. H. LONG in the chair.

The secretary referred to the use of salicylate of soda in insomnia, mentioning a case where it had been administered for another condition, but with happy effect on the sleeplessness of the patient. Dr. A. G. Bennett reported a case of furunculosis cured by large doses of soda salicylate, accidentally administered.

Dr. JACK, of Depew, then read a paper on The hygiene of the asthmatic. Referring to a previous paper on Asthma, read before the Academy, in which he described asthma as an "abnormal biochemistry, due to altered conditions of the blood and divided into (1) anemic; (2) leukemic; (3) lithemic forms. He went on to consider the various methods of treatment. These he divided into diet, habits, baths, altitude, light and habitation. Dr. Jack advocated a gradual change to a proteid diet, with a free use of fruit rich in acids, as well as foods rich in alkalies. Hydrotherapy was next in importance to diet, while sunlight and a life at high altitudes, exercised a beneficent effect upon the disorder. He discountenanced the use of alcohol and tobacco, and noted that drug habits were often imposed upon asthmatics by physicians.

Dr. JOHN H. PRYOR then read a paper on Protracted pneumonia, with slow recovery. He had noticed the following groups: (1) Attack prolonged four to eight weeks, ending in recovery. Resolution gradual, protracted or incomplete; (2) relapsing or recurrent pneumonia; (3) subsidence of symptoms, but consolidation remaining and a later return of symptoms; final recovery; (4) pneumonia of a lobe or part of a lobe remaining three or four months; (5) pneumonia, assuming a chronic form and ending as "fibroid phthisis." In discussing the treatment of such cases Dr. Pryor laid great stress upon "respiratory exercise," with or without the pneumatic cabinet.

DISCUSSION OF DR. JACK'S PAPER.

Dr. BLAAUW thought asthma was due to a nervous cause and could not be cured by any one method of treatment.

DISCUSSION OF DR. PRYOR'S PAPER.

Dr. B. G. LONG quoted several cases from his practice where change of air and altitude had been of greatest benefit in chronic pneumonia.

Dr. JEWETT emphasised the use of exercise of the chest in such troubles and of the uselessness of cough mixtures, so-called

Meeting adjourned 10.05 p. m; members present, 33.

Section on Medicine, Tuesday Evening, December 12, 1899.

The third regular meeting of the Section of Medicine was held at the Academy Parlors, Market Arcade, December 12, 1899. Meeting called to order at 8.30 p. m., Dr. ELI H. LONG in the chair. The minutes of the last meeting were read and approved.

Dr. A. L. BENEDICT presented a case of general splanchnoptosis, which he said, though not typical, showed a downward displacement of the liver, colon, stomach, left kidney; and commented on the rarity of liver displacements.

Dr. J. H. DOWD reported a case of thecitis due to gonorrhea. A man consulted him September 28, 1899, having had a gonorrheal discharge for two weeks. On October 17th he complained of pain in the back and right knee. On October 26th, pain had left the back and knee, but there was much pain in the flexors of the left femoral region (sartorius not included). Between this and November 3d, the pain persisted and moved to the popliteal space, at the same time involving an area over the sartorius muscle. On November 10th, the pain had disappeared, as had also the gonorrheal discharge. Dr. Dowd stated that Dr. Clemesha had called his attention to a case reported by Prof. Eichorst, which although being similar in complicating gonorrhea was accompanied by pronounced swelling of the region involved, and was diagnosticated as myocitis. His case, although involving the same region was not accompanied by swelling. Prof. Eichorst concludes that this complication always involves the femoral region, and is due to gonococci and not staphylococci.

Dr. M. D. MANN reported the case of a lady on whom he had done an Alexander's operation for backward displacement. She afterward married and became pregnant with a return of the backward displacement. On examination the retroversion was found due to the weight of an extremely dilated stomach lying on the enlarged and gravid uterus.

Dr. A. A. JONES and Dr. A. W. BAYLISS reported severe cases of measles, in which prominent symptoms were, obstinate vomiting and diarrhea.

Dr. ROCHESTER reported a series of cases among children of one family, probably of scarlatina sine enthemata. After short periods of slight illness, and without rash there was free desquamation of the epidermis.

Dr. A. A. JONES read a paper on The relation of indicanuria to the secretion of hydrochloric acid. He had based his paper upon the statement of Simon, of Baltimore, that the presence of indican in the urine was proof of the absence of free hydrochloric acid in the stomach.

In a series of 162 cases, Dr. Jones found that in 85 there was free hydrochloric acid with no indicanuria; in 36 there was free hydrochloric acid with indicanuria; in 25 there was no hydrochloric acid, no indicanuria; in 16 there was no free hydrochloric acid with indicanuria. Thus he believed that Simon's conclusions are wrong and quoted the researches of Vaux, of Ottawa, Canada, with whom he was more in agreement. Dr. Jones gave the history of indican in the urine (Prout, in 1840) its nature, formation and site and the clinical aspects of its presence in large quantities. Amongst various conditions it is present in intestinal putrefaction, ileus, stricture of small intestine, gastric ulcer.

Dr. A. L. BENEDICT in discussing the paper agreed with Dr. Jones in his conclusions and asked how far indican in the urine might be considered as a test of renal permeability?

Dr. ROCHESTER related his experience, after perusal of Simon's paper, of giving hydrochloric acid in certain cases with indicanuria. He had to stop the use of the acid, and concluded that Simon's conclusions could not be taken as an index of treatment.

Dr. STOCKTON spoke briefly, congratulating Dr. Jones on his paper and referred to indicanuria present in achylia gastrica.

Dr. DOWD—I am sorry that Dr. Jones did not lay more stress on the fact that indican should be searched for in every case. Being associated as it is with putrefactive changes in the intestinal tract and also found in marked quantities in intestinal indigestion. I am sure that a correction of these would be not only very beneficial to the patient's condition but also aid us in the disease for which we may be treating them at the time. Simon says it is as important to search for indican as it is for albumin.

It was intended to take up the personal experience of members in regard to certain new drugs, but the lateness of the evening decided an adjournment.

Members present, 39.

Section on Pathology, Tuesday Evening, November 21, 1899.

REPORTED BY FREDERICK H. MILLENER, M. D., Secretary.

THE third regular meeting of the Pathological section for the season, was held on Tuesday, November 21, 1899.

The meeting was called to order by the chairman, Dr. A. G. BENNETT, at 8.50 p. m.

Forty-two Fellows were present.

The minutes of the preceding meeting were read and approved.

The subject for the evening was a paper by Dr. C. S. Butler, entitled, Pathological dentition. He said at the same time that changes are taking place in the teeth there are changes going on in the remote organs of the body, which have a marked bearing on the teething process. Preponderance of the spinal nervous system is especially marked in the infant, and it is owing to this fact that the sympathy of distant organs with one another is much greater in infancy than in adult life and produces in them a special tendency to reflex nervous disturbance. The teeth in infancy are made up largely of nerve tissue. At birth the child has not only twenty deciduous teeth advanced toward calcification, but also the germs of the twenty-four permanent teeth. It is plain to be seen that the future condition of the teeth may be jeopardised by any circumstance affecting the health of the mother during this period. At present it is the opinion of a vast majority of authorities that teething is frequently the only assignable cause of some of the diseases occurring during the dentition period. In several cases children suffering with fever, diarrhea, anuria, paralysis, and convulsions, were cured by lancing the gums, when other treatment had failed to relieve.

The paper was discussed by Doctors Irving M. Snow, H. R. Hopkins, Delancey Rochester, E. H. Long, Low and C. W. Stainton.

Dr. IRVING M. SNOW said that about the six or seventh month is the time of much sickness among children, and more die at that time than at any other time. He thought the vast majority of illness with children is due to other causes than dentition. He never saw a case of convulsion that was not excited by another cause.

Dr. H. R. HOPKINS believed that dentition played an important rôle in causation of disease.

Dr. DELANCEY ROCHESTER stated the case of a child of about eighteen months that had a nervous disturbance and cough followed by convulsions which remedies did not relieve, while lancing the child's gums caused in twenty-four hours the symptoms to subside.

Dr. E. H. LONG stated that he thought when either extreme was adopted in reference to the developmental disturbance of infancy, we were taking a fragmentary view. There are diseases which could not be assigned to teeth.

Dr. BUTLER closed the discussion by saying that more attention is given to the question of dentition as it relates to any period of life and to the general system in Europe than in this country. He related the case of a woman who went to a hospital in Hamburg to be treated for paralysis, and the first question she was asked was if her teeth had been examined.

Obstetrical Section, Tuesday Evening, November 28, 1899.

REPORTED BY ALBERT J. COLTON, M. D., Secretary.

A REGULAR meeting of the Obstetrical Section was held November 28, 1899, at the Academy Parlors. The chairman, Dr. H. D. INGRAHAM,, called the meeting to order at 8.45 p. m. The minutes of the previous meeting were read and approved.

The first paper of the evening, entitled, *Lessons from practice in obstetrics*, was read by Dr. P. W. VAN PEYMA.

The paper was filled with practical and instructive points, which the author had learned and gathered from his large obstetrical practice. He reviewed asepsis and antisepsis and expressed his opinion that absolute cleanliness was of much more importance than antiseptic washes and douches. He did not recommend antiseptic soaps, neither did he advise frequent douching after labor, especially if he had an inexperienced nurse. He disapproved of the early use of the forceps in labor and expressed his opinion that a patient in labor was safer in the hands of a midwife than an inexperienced physician.

He spoke of posterior positions and said that they occurred about once in five vertex presentations, and that fourteen out of fifteen would be converted into anterior positions if left to nature. He said in face presentations, if the chin was posterior, he let it progress and at last deliver with forceps; but if the chin was anterior, he attempted early to convert it into an anterior vertex position. He also spoke of placenta previa, and said where it was central he tamponed and waited for full dilatation before delivery. He said a weekly examination of the urine of a pregnant woman in the latter part of pregnancy was not sufficient and cited an example. The patient or some one in charge should be instructed if persistent headache occurred to

notify the doctor at once. He laid great stress on diagnosis of position. Many other interesting and instructive points were mentioned.

The second paper of the evening was read by Dr. IRVING P. LYON, on the Mensuration and capacity of female bladder. The paper was very exhaustive, showing study and original research. Many original cuts and plates were shown to illustrate it. His study revealed that the rectum in a majority of the cases lies on the right side rather than on the left, as taught in text-books, also that the uterus in his examinations lies to the left of the median line. His method of measuring the capacity of the female bladder with air was quite novel and unique.

The papers were discussed by Drs. Mann, Grosvenor, Frederick, Rochester, Hopkins, James S. Smith, Jones and Stoddart.

Dr. MANN led in the discussion and disagreed with Dr. Lyon as to the air pressure of fifteen pounds to the square inch being the distending force while a patient was in knee-chest position, but that it depended on the posture of the patient, also that the distending pressure varies according to the individual. In regard to Dr. Van Peyma's paper he said that there were points enough to take a week to discuss. He said that his views were pretty well known, as he had threshed them over with Dr. Van Peyma many times. He disagreed with the author as to the non-use of antiseptic soaps for the hands. Where a physician was attending contagious and pus cases he recommended that a thin rubber cot be placed on the examining finger to prevent infection. He agreed with Dr. Van Peyma as to diagnosing position in face presentations and believes that it should be corrected early. He, however, did not agree with him as to tamponing in placenta previa until there was full dilatation; but thought best to perform version by the Braxton Hicks method as soon as the hand could be introduced and bring down a leg to act as a tampon.

Dr. ROCHESTER said in regard to eclampsia, where an attack comes on give morphia hypodermatically until the fits are controlled, and then get the patient to sweating by the use of hot air. If unsuccessful use small doses of pilocarpin in connection therewith. He has seen free perspiration produced with as small a dose as 1.50 of a grain. Watch the urine, especially as to reaction, as it is usually strongly acid in pregnant women. As to use of chloride of mercury as a uterine douche, he had employed it in his early practice as strong as 1-1000 without any ill-effects. He thought that where

there was a rise of temperature due to decomposed, retained membranes that it was better to irrigate the uterus freely than to resort at once to the curette.

Dr. GROSVENOR said in regard to post partum hemorrhage that he had best results in controlling it by pouring cold water from a distance on the abdomen, directly over the uterus, also by introducing his closed hand into the uterus and making pressure from without until his fist was actually forced out by uterine contraction.

Dr. FREDERICK spoke particularly as to antisepsis of hands. Uses rubber gloves in making all examinations of patients, rectum, vagina, and the like, also in dressing pus cases, thus preventing the infecting of his hands and the danger of carrying infection to others. He said great caution should be used in changing from face to vertex presentations as he had caused rupture of uterus thereby.

Dr. HOPKINS thought the hands could be made obstetrically antiseptic though they could not be made germless.

Dr. JAMES S. SMITH thought the paper an admirable one and complimented its author.

Dr. STODDART asked if the torn ends brought together after a ruptured perineum held readily and firmly.

Dr. A. A. JONES asked Dr. Mann what kind of germs were on his son's hands after his experiments in making them aseptic, also if there was not a probability that he reinfected them in the air while passing from the antiseptic solutions to the culture media.

Dr. Mann said the germs found were not pathogenic.

The discussions were then closed by Drs. Van Peyma and Lyon.

There were present thirty-six members. Meeting adjourned at 10.45 p. m.

MEDICAL SOCIETY OF THE COUNTY OF CHAUTAUQUA.

REPORTED BY C. E. ELLIS, M. D., Secretary, Sherman, N. Y.

THE semi-annual meeting of the Medical Society of the County of Chautauqua was held at the Hotel Sherman, Jamestown, N. Y., December 12, 1899.

The meeting was called to order by the President, Dr. V. M. GRISWOLD, of Fredonia, at 11 o'clock a. m., when the regular routine

of business was transacted in the following order: Reading the minutes of last meeting; admission of new members; unfinished business; reports of committees: miscellaneous business.

The afternoon session convened at 2'o'clock for the consideration of the scientific part of the program: Address of the vice-president—Carcinoma of the stomach and liver—E. A. Scofield, Bemus Point. General discussion. An unusual line of treatment in a case of tetanus, L. C. Green, Panama. Malaria and typhoid fever in pregnancy, William Casper Duke, Cassadaga; Insanity, A. J. Bennett, Busti. Pleurisy, Edgar Rood, Westfield. Report and presenting of interesting cases to the Society. (Each member is expected to report at least one case.) Urea and uric acid from a physiological, pathological and clinical standpoint, Jason Parker, Jamestown.

EVENING SESSION.

Orthopedic appliances, Wm. M. Bemus, Jamestown. Some things I noticed, N. G. Richmond, Fredonia.

The absence of Dr. E. A. Scofield, the vice-president, on account of a serious illness, cast a gloom over the meeting, and his address was therefore omitted.

Dr. F. E. Lilly's death was reported and suitable resolutions were ordered placed upon the minutes, and sent to the family.

In the evening Dr. WM. M. BEMUS read a paper from his personal experience with an orthopedic appliance, he having had to wear one most of his time since he returned from the army. He has secured Mr. E. M. Sheldon to manufacture the one that seems best adapted to his condition.

Dr. N. G. RICHMOND spoke briefly of a trip abroad he took last summer. He had the attention of the meeting and all were well pleased and instructed by his verbal pictures.

The Jamestown Medical Society entertained the society at a banquet after the evening session. It was served at the New Sherman Hotel, and twenty-four of the members of the societies were present. It was a most enjoyable occasion and one to be long remembered. Those present during the day and evening were Drs. V. M. Griswold, N. G. Richmond, Fredonia; W. C. Duke, Cassadaga; G. F. Smith, Sinclairville; T. D. Strong, Westfield; W. J. French, Hamlet; C. W. Southworth, Forestville; E. S. Rich, Kennedy; W. O. Smith, Falconer; J. R. Smith, Connewango; L. C. Green, Panama; A. J. Bennett, Busti; G. D. Marsh, C. A. Ellis,

Sherman; W. M. Bemus, M. N. Bemus, Jane Greeley, J. J. Mahoney, J. W. Morris, A. B. Rice, L. Hazeltine, H. A. Eastman, A. A. Becker, W. D. Wellman, W. W. Hotchkiss, J. Parker, Jamestown; H. F. Hunt, Dewittville.

Progress in Medical Science.

OPHTHALMOLOGY.

CONDUCTED BY ALVIN A. HUBBELL, M. D., Buffalo, N. Y.

SUPPRESSION OF THE CRYSTALLINE LENS IN MYOPIA.

PROF. PFLÜGER, of Berne, has an elaborate paper in the *Bulletins et Memoires*, of the French Ophthalmological Society, covering 197 octavo pages, which may truly be considered a classic on the subject of the removal of the crystalline lens in myopia. The burden of the paper is an analysis of 103 cases (108 eyes) operated upon by him between 1891 and 1896, of which 95 have been followed up. Incidentally, he reviews the history of this method of treating myopia, clinical ophthalmometry, optometric determination and mathematical expression of the degree of ametropia, and the diminution of refraction by aphakia. After detailing 101 cases, he follows with a consideration of their etiology, the influence of heredity, their ages at the time of operation, and the conditions, as to degree of myopia, age, acuteness of vision, and pathological appearances, indicating an operation. In regard to the operation itself and its results, the following abstract, taken from the *Ophthalmic Review*, October, 1899, will give the reader the gist of the author's experience :

It is in the cure of high myopia that removal of the transparent lens presents the greatest theoretical and practical interest. As regards the two serious objections to the operation, loss of accommodation and detachment of retina, the pernicious consequences of accommodation on the nutrition of the myopic eye are removed, whilst nothing justifies the fear of a predisposition to retinal detachment caused by the aphakia, the results pointing rather to a prophylactic influence. The operation should not be blamed for causing a detachment, unless it has been accompanied by complications. From the end of 1891 to the end of 1896 Pflüger operated on 103 cases (108 eyes) and has been able to follow up 95. He points out

that it is necessary to be exact in the estimation of the ametropia; the astigmatism and the radius of curvature of the cornea being determined by Javal's ophthalmometer, the state of the refraction might be directly expressed by the neutralising lens placed at the anterior focus of the eye, according to the ophthalmometric method of Giraud-Teulon. Observations show that removal of the lens is not always followed by the same diminution of refraction in eyes which had the same degree of myopia. This is due to errors in the determination of the ametropia. Those errors due to spasm of accommodation can be avoided by the use of atropine, and those due to insufficient correction of astigmatism by the employment of the ophthalmometer. Errors, more or less inevitable, result from the difficulty of placing the correcting glass at the anterior focus of the eye, which varies according to the radius of curvature of the cornea. The errors resulting from position, degree of curvature, and index of refraction of lens or aqueous are negligible. According to a formula, established by Pflüger for the approximate prognostication of the refraction after aphakia in different degrees of myopia, a myopia of 16D., with a corneal refraction of 50D., will become emmetropia, as also myopia of 18D., with a corneal refraction of 45D., and a myopia of 20D. with a corneal refraction of 41D. or 42D.

Of the ninety-five cases which Pflüger analyzed, eighty-nine had one eye operated on, and six had both done. Hereditary influence was noted in 52 per cent. of cases; and in 91 per cent. the myopia was congenital. The operation was done in eighty-three cases between the ages of 7 and 30; in twelve cases between 30 and 40; in five between 40 and 50; and once at 51. Patients from 7 to 10 years with high myopia ought certainly to be operated on, and even if the myopia is below 12D. and there is a fair corneal curvature, we should not wait for irreparable changes in the fundus or vitreous before interfering; for a myopia of this degree is to be looked upon with suspicion, and operation gives a better guarantee for the maintenance of the status quo than wearing glasses.

For determining in what cases it is justifiable to interfere it is necessary to consider not only the degree of myopia, but also the age of the patient, the mean corneal refraction, the visual acuity, the general condition of the patient, his social position, and the progress of the myopia in himself and his family. If reduction in visual acuity compels the patient to change his profession, operation would be indicated for a myopia distinctly below 16D. Rapid increase in

the myopia before 20, and particularly after that age, would be an indication for operating even in moderate degrees of myopia.

Pflüger's cases have been followed up for a period of from two to seven years and allow of interesting deductions. The cases are divided into three classes, according to the degree of myopia at the time of interference. The first class comprises myopes of 10D to 13D. Three cases, from 9 to 11 years, were operated on for a myopia of 10D., with a resulting hypermetropia of from 3.75D. to 5.75D., and a marked increase in visual acuity. One case was attacked with choroiditis two years after operation, which seriously affected the vision. In five cases of myopia of 11D., three were aged from 8 to 12 years, one was aged 15, and one aged 20; the resulting hypermetropia was 2.5D. to 5D., and the visual acuity in all cases was improved. Of twenty cases of 12 to 13D., fourteen were below 20 years, and six between 20 and 28 years. The resulting hypermetropia varied from 2D. to 5D., and the vision was improved in all the patients but one, whose sight was lost from detachment of the retina ensuing some years after the operation.

The second class comprises myopes of 14D. to 15D. In twelve cases the myopia was 14D. and in four it was 15D., the age varying from 9 to 23 years in 14 patients, one patient being 30 and another 40. Four times there resulted emmetropia in one meridian, the other being corrected by concave cylinders of from 1D. to 2D. In the other cases the correcting spherical lenses varied between 1D. and 4D.

The third class includes fifty-three cases of myopia of 16D. to 29D. The age of the patients varied between 7 and 51 years. In one case of 16D., three cases of 20D., and one case of 21D., the refraction became emmetropic after operation. In nineteen cases the refraction was still myopic, one case having an initial myopia of 17D., three cases of 18D. and the others of 19 to 20D. The myopia or hypermetropia resulting in all cases never exceeded 4d.

Visual acuity was improved in all cases but two; in one case there was a secondary infection following the discission, and in the other a central retinal hemorrhage in the course of an attack of delirium tremens. In addition two eyes have lost their vision after some years, one from retinal detachment and the other from severe choroiditis.

Pflüger thinks that the improved visual acuity depends on a better nutrition of the organ leading to an improvement in the function of the retina, as well as on the development of the function of the occipital lobe by distant vision. He has in most found an improvement in

the visual field and color sense. In his own cases he has not found one in which the myopia made any disquieting progress during the period of from two to six years after operation. In most unfavorable cases the elongation of the antero-posterior axis was less in the eye operated on than in its fellow.

The comparison of the two eyes leaves no doubt of the prophylactic action of the operation. Pflüger considers extensive corneal opacity as about the only real contraindication. Neither myopic choroiditis nor old central choroiditis with definite loss of central vision contraindicate. Severe acute central choroiditis is, moreover, an urgent indication for operation. Discission not extending to the posterior capsule and followed by simple extraction aided by the curette is recommended in all cases.

Increase of tension, even if painless, should call for linear extraction. The lance should be inserted in the limbus and the curette be used only to evacuate loose masses of lens substance, the operation being reduced in a manner to simple paracentesis, which can be repeated several times without danger. With regard to flap extraction, it should be reserved for those ages when a hard nucleus is expected or in cases where a first discission has proved the existence of such a nucleus. In the discission of secondary cataract Pflüger lays stress upon the danger of interference with the vitreous and prefers using the "pince-ciseaux" of De Wecker, or the harpoons of Stelling. With regard to post-operative complications, infection of the wound is possible in spite of all precautions, and detachment of retina, Pflüger holds, is merely a question of chance; for although loss of vitreous should be avoided, it is not only the factor in producing detachment, since in the one case in which it ensued there had been no loss of vitreous, and nine cases in which vitreous had been lost did not become affected with detachment. Glaucoma has not resulted, but it could be met by iridectomy. It is difficult to say whether vitreous opacities may be the consequence of intervention.

Prof. Pflüger concludes his valuable paper with an extended bibliography.

ILLEGAL MEDICINE.

Conducted by NELSON W. WILSON, M. D., Buffalo, N. Y.

CONSUMPTION AND CHRISTIAN SCIENCE.

JOSEPH MORGAN died recently in Philadelphia of pulmonary tuberculosis. This in itself is not strange, but the facts surrounding the case are peculiarly interesting at this time when christian

scientists are on the rampage. Morgan was fairly well-to-do. He was not under medical treatment, having been prayed over by his wife and a "healer." It was said that Mrs. Eddy was induced to come to Philadelphia and give treatments. As his end approached he suffered. His faith wavered and broke under the strain and he begged that a physician be sent for, to relieve his suffering. The best he got was a copy of the christian science *Sentinel*, which was placed in his hands, so report from Philadelphia says, and he was told to read it. Then he "passed on." His death would have been just as painful and just as certain if he had been given one of Laura Jean Libby's continued-in-our-next tales of mill-room passion.

There can be no question that Morgan's wife was sincere. Even if there was it would not be kind to raise it just at this time. Morgan was an adult capable of thinking for himself. So long as he did not want a physician all well and good. He got what he wanted—christian science, and he got it good and hard—the best there was of it, but when he did ask for a physician he should have had one, and not been deprived of the relief he could have experienced, because a smug and holy "healer," kept a blind and foolish faith-stricken wife under the power of a religious superstition.

Since the publication of this case in the newspapers, "Mother" Eddy has sent out broadcast this letter :

Concerning the article on the death of Mr. Morgan, of Germantown, Pa., I will state I never visited Mr. Morgan's house, never attempted to heal him, never knew of the case until it was published. Have many years advertised I am not to be consulted on cases of disease, and take no patients.

The construction of this letter when compared with the published writings of the high priestess brings to mind the rumor which has been circulated that the lady who goes by the name of Mary Baker G. Eddy is a figure-head, and that the original seeress is dead and has been for some years.

"PARALYSIS OF THE HEART" AND THE HEALERS.

Down at Rome, N. Y., Mrs. Moses M. Davis "passed on" under the ministering care of a christian scientist. Coroner Nock began an investigation.

Lizzie Moore, first-reader, and the second-reader, a man named Davidson, testified that Mrs. Davis suffered only from a delusion. They said they would confine their efforts to christian science treat-

ment, in the case of a person who was bleeding to death. The post mortem examination showed Mrs. Davis had died of "paralysis of the heart."

INFECTIOUS DISEASES AND THE SCIENTISTS.

CHICAGO has epidemics of scarlet fever and measles, and the health authorities openly charge that the spread of the disease is due to failure of christian scientists to report cases, thereby preventing isolation.

THE BUFFALO ENQUIRER CRITICISES THE CULT.

ONE of the most common sense editorials on christian science yet printed was published recently in the *Enquirer*. It is as follows:

Christian scientists taunt medical practitioners with being "hit or miss" doctors. It is true that there are many things which the best medical skill can only guess about. It may guess right or it may guess wrong, and a human life may depend upon the guess. Medical science is still very young, as the wisest doctors know best. But medicine has a few comforts for suffering humanity which never fail.

In the report of a girl's death from cancer at South Manchester, Conn., under treatment by christian science we find this:

"Christian scientists continued to use their method of healing, but the cancer spread. Mr. Behenfield urged that a physician be called in, but the mother and brothers and sisters of the sufferer would not accede to his suggestion.

"Toward the last the girl's agonised cries so affected the neighbors that general indignation was aroused. Nothing that would deaden the pain was administered, and the patient's death was learned of with relief."

If neither medicine nor surgery could have worked a cure, medicine would, at least, have prevented the agony of this girl's last months. The merciful poppy never fails. So far as the relief of pain is concerned, medicine is an exact science. Its detractors should bear this in mind and get something equally reliable before they ask us to cut loose from it.

TOOTHACHE HEALERS AND THE U. OF B.

THE Rev. A. P. Moore, pastor of the Seventh Day Adventist Church of Buffalo, sent the following communication to *The Courier*, and vouched for its truthfulness:

"Mrs. Eddy, the christian science leader, found that she had a tooth that could ache. She recently went to Dr. Rae, of Concord, New Hampshire, an Adventist, and had it extracted. I consider

that this spoils the theory of the so-called christian science, and proves that Mrs. Eddy is an imposter."

Edmund R. Hardy, a christian scientist, of No. 522 Ellicott Square, was asked if the statement was true.

"I don't accept it," he said. "For the last fifteen years I have heard all sorts of ridiculous reports concerning Mrs. Eddy, and I never pay any attention to them. The things that they say about her are, some of them I know personally, without foundation whatever."

"But if this were true, could you conscientiously support her?"

"Certainly. If the statement is a fact, it is in no sense an inconsistency in the christian science doctrine. We don't profess to do away with surgical operations, only the usual pain accompanying them. The last edition of the *Sentinel*, our official organ, tells of a dentist who gives christian science treatment in the place of anesthetics. Here only the other day one of the students of the University of Buffalo told me that a professor in the Dental Department said that the science treatment was coming into use in painful extractions instead of anesthetics. Mrs. Eddy might have had a tooth extracted, and it would have been entirely consistent and proper."

"And she would have suffered no pain?"

"None whatever. I can give you the testimony of a dentist who took nearly the entire nerve out of a child's tooth without the child scarcely being made aware of it."

If Mr. Hardy is correct regarding his University of Buffalo statement, the professor should be induced to give a public clinic. But on the whole Mr. Hardy's statement seems very like his defense of christian science before the committee on ordinances—very flimsy and evasive.

WITCHCRAFT AT THE CENTER.

THERE is a small town in Wisconsin called Center, which must be inhabited by a most remarkable set of people. Imagine witchcraft being seriously considered in the closing days of 1899. The story as told by the newspapers is as follows:

Last August Mrs. Herman Dalke died under mysterious circumstances. Shortly afterward her children, Mary, aged 14, August, aged 8, and Antonio, 6, also died.

The peculiar circumstances surrounding the deaths caused a lot of talk and the name of John Dalke, her brother-in-law and a cripple, was mentioned unfavorably. Then a queer disease attacked stock in the neighborhood and several head of cattle died. This caused great excitement and the German settlers of the vicinity accused young Dalke of witchcraft.

The cripple instead of denying the reports claims he has supernatural powers. The neighbors threaten to lynch him. "Witch

doctors'' have been appealed to and they throw out dark hints of young Dalke's powers and his possible connection with the exciting events at Center.

ADULTERATION OF FOOD PRODUCTS.

SENATOR MASON, of Illinois, representing the United States Senate Committee on manufactures, has been investigating the adulteration of food products. The inquiry has been thorough and it is more than likely that results will follow, when Senator Mason makes his report to the Senate.

Prof. Russell H. Chittenden, professor of physiological chemistry at Yale University, director of the Sheffield School of Science and President of the American Physiological Society, described the action of antiseptics on the human stomach. Salicyclic acid, which the brewers have testified is used as preservative, Prof. Chittenden said retards digestion. Borax has a like effect, but he had found no deleterious effect from the use of boracic acid in small quantities.

Very few of the general food products on the market analysed by Prof. Chittenden showed the presence of antiseptics as preservatives. Prof. Chittenden said the best result would be obtained by compelling manufacturers to stamp on their products the nature and quantity of the preservatives used. He believed there should be a law prohibiting the use of coloring matter in preserving fruits and vegetables.

The witness said he had analysed all sorts of domestic liquors, including beer, and that the only adulteration he had found was an addition of water in whisky. He described beer as a hop and malt product and considered the substitution of unmalted cereals would be technically an adulteration, but not necessarily deleterious to health.

Prof. Chittenden would favor the fixing of a United States standard of purity of all food products, including liquors and the appointment of a commission of scientific experts to fix such standards.

James N. Jarvie, of Arbuckle Bros., coffee dealers and sugar refiners, told of the impurities found in the imported coffees and of the work of purifying them necessary before putting them on the market. A very small quantity, less than 1 per cent. of the total importation, is refuse coffee.

Willis G. Tucker, professor of chemistry in the Albany Medical School, and Director of the State Board of Health Laboratory, said

the insufficiency of the state appropriation had prevented his doing much in the way of examining food products. Most of his time is devoted to drugs.

The law against the use of adulterants is sufficient, Dr. Tucker said, but without a large appropriation to conduct frequent analyses it is almost impossible of enforcement. For that reason, although the state has the power, it has never attempted to fix any standard of purity except in the case of vinegar, mustard and milk.

Dr. Tucker said he would have all food products carry labels, showing what antiseptics have been used in their manufacture. He favored the appointment of a national commission to fix a standard of purity of food products. Such a commission would do much to curb the popular misconception that there is a general adulteration of food. He declared his belief that there is very little such adulteration outside the imagination of the editors of various Sunday newspapers.

GENITO-URINARY AND SYPHILITIC DISEASES.

CONDUCTED BY BYRON H. DAGGETT, M. D., Buffalo, N. Y.

RENAL CASTS—THEIR SIGNIFICANCE AND DETECTION.

LINSLEY, J. H., (*New York Med. Record*, October 21, 1899,) says there is no disease so frequently undetermined in its incipency as chronic Bright's. It occurs about middle age in the apparently strong and robust. It is the most insidious of maladies and is often well advanced before detection or even before advice is sought.

The first symptoms are frequent nocturnal micturition (two or three times), slight dyspnea and mild digestive disturbances. Neuralgia will affect persons of a nervous temperament. The urine may be normal in color, specific gravity and reaction. Generally there is no albumin, occasionally a trace (1.40 of 1 per cent. by weight). The usual cloud of nearly transparent mucus may form after an hour or two. Place some of the deposit formed by the centrifuge under a microscope and hyaline casts, crystals of uric acid and oxalate of calcium, a few red blood cells, a few leucocytes and squamous and possibly round epithelia will be found.

The hyaline cells and blood cells are of the greatest importance. The casts are found in the renal tubules. The renal tubule begins in the Malpighian body. The renal tubule is 1.120 of an inch in diameter and consists of a loop of blood capillaries from the afferent

vessel and is undeveloped in a delicate membrane and a single layer of flat epithelial cells. Within this envelope are found the convoluted, spiral and irregular tubules; larger arched and straight tubes, Henle's loop and excretory duct. The spiral, convoluted and irregular tubes are known to possess secretive power. They are lined with the "rodlike cell of Heidenhain." The cells of all the active tubules are flat and columnar.

The lining membrane of the Malpighian body or Bowman's capsule, normally, is a filter for water, and is an effective barrier to the transmission of all organic constituents. These are eliminated in the convoluted, spiral and irregular tubules by a process of true secretion. In health none of these will allow the passing of the albuminous constituents of the blood plasma.

If, however, there be impaired nutrition of the tubular walls, excessive pressure from the renal artery, or any degeneration of the basement membrane or lining cells, the blood plasma may pass through the walls of the tubules and coagulate in their lumina. This serous exudate passing into the uriniferous tubules forms a plug, which washed out by the urine forms the hyaline cast. The hyaline cast is the basis of several other casts, such as the epithelial, granular and blood casts. The cast may be loaded with leucocytes, bacteria or fatty lobules. Varieties are: hyaline, granular, epithelial, mixed, blood, fibrin, pus, bacterial, waxy and cylindroid. These may be narrow or broad. Broad casts have the greatest significance; hyaline casts indicate an advanced chronic interstitial nephritis.

Granular casts are the result of disintegration, and indicate a nephritis of some little standing with involvement of the parenchyma of the kidney.

Epithelial casts indicate acute parenchymatous inflammation.

Mixed casts have the same diagnostic value as the epithelial.

Blood casts indicate renal hemorrhage, due to traumatism or some destructive disease.

Pus casts are rare.

Fatty casts indicate an active degeneration of protoplasm.

Bacterial casts are found in septic nephritis and pyelonephritis.

Cylindroids, if from the kidneys, have the same significance as hyaline casts. If from the urinary tract, have no significance of renal disease.

Detection of casts: The sediment is put on the stage of a microscope, without a cover, and the examination made through a

three-quarter or half inch objective and illumination of the specimen carefully made. After carefully examining the specimen under a low power, put on a cover glass and use a No. 5 or 7 objective. This will bring out the structure of the casts, if present, and epithelial cells and detect pus and blood cells as well as bacteria. The examination should always begin with the lower power.

Abstracts.

CAUSE AND PREVENTION OF INFANT MORTALITY.

AT THE last meeting of the American Public Health Association, held at Minneapolis, Minn., October 31 and November 1, 2 and 3, 1899, Dr. Ernest Wende, of Buffalo, presented a report on the Cause and prevention of infant mortality.

He paid particular attention to the subject of the milk industry, which he said should be under both state and municipal control, operating in harmony under similar principles with the identical object in view, both acting together, forming a system of protection from dairy to consumer. The state should exercise its functions and control until it passes within the municipal limits and authority and should include every feature and detail in all aspects of protective sanitation. These features include briefly :

(1) The license system, with fee, periodic systematic inspections, with revoking power and penalties for dereliction; (2) the inspection system should include inspection of herds (tuberculin tests), food, animal care; (3) demand sanitary environment and buildings, correcting existing evils, and examination and approval of plans, pending erection of new ones, which should comply with a standard of sanitary construction with special reference to specific requirements of the business—namely, separate milking and stabling quarters, proper cubic air space, nonabsorbent materials; (4) scrutiny of water supply, standard feeding, health of employees, hygienic care of utensils and cans, cleanliness and protection in milking; (5) definite rules governing all procedures, particularly as to the cooling process, preparation for market, and in relation to the varying seasons; (6) the differentiation of the various characters of milk by different colored or shaped cans, and being properly labelled with date of milking, time of shipment; (7) prohibition of milk preservatives and coloring agents, of adulteration, and of the marketing of milk from

diseased, sick or parturient cows, of the use of disinfectants, their necessity implying bad sanitation; (8) the prohibition, particularly of refuse or swill food, upon any dairy premises of any food by reason of decomposition or fermentation considered unhealthful, and of the association of other domesticated or housing animals with cows; (9) a standard of quality, with periodic testing and analysis; (10) veterinary inspection with distinction and compensation within and quarantine against the introduction of tuberculous cattle from without the state; (11) it should be as rigid as against pestilence in man, and it is only by this means that the malady can be circumscribed and its bearing on human life favorably influenced; (12) with this standard of supervision by the state, the municipality should continue the supervision upon the same lines and which may be outlined as follows :

(a) Continuation of the license system with penalties, together with stringent ordinances covering quality, adulteration, sanitary care and relation to contagious disease contamination; (b) milk should comply with the state standard as determined by lactometer tests, periodically instituted, as ascertained both in milk houses and on wagons; (c) sanitary nonabsorbent milk-rooms, of determined size, air space, ventilation and light; (d) with specifically constructed, indirect plumbed cooling and storage boxes, and noncommunicating with sleeping rooms, privies, stables or other influencing rooms; (e) wagons properly lettered and numbered, with protection from summer heat; (f) stringent prohibition regarding intercourse with houses containing contagious diseases, particularly relating to the exchange of milk bottles and the prohibition of refilling of jars *en route*; (g) the constant surveillance of contagious disease in relation to milk routes by means of the "tell-tale register;" (h) obligatory cleansing of milk utensils by a uniform method and of cans before returning to the dairy; (i) special supervision of and discouragement, if not abolishment, of grocery store and similar character milk sellers, where the business is subordinate to other interests, with a consequent lack of protective facilities; (j) until state and city act in unison in this, where interests are identical, the adoption of arbitrary interdiction or destruction at the city line of all milk coming from dairies whose condition or herds may have a deleterious influence upon the milk; (k) systematic system of reports and with mutual warnings and notification of imperilling conditions.—*Boston Med. and Surg. Jour.*

ACCIDENTAL WOUNDS OF THE FEMALE BLADDER.

FREDERICK HOLME WIGGIN, M. D., New York, (*Jour. Am. Med. Ass'n*, September 9, 1899,) says: Accidental opening of the bladder has, for many years, been considered one of the most serious accidents that could occur in the course of the complicated work which gynecic surgeons are often called upon to perform. The following case is offered in illustration of this type of injury:

M. H., unmarried, aged 41, was admitted to the City Hospital, Blackwell's Island, N. Y., September 30, 1898, suffering from a large myoma, which sprung from the anterior uterine wall and extended above the umbilicus. On October 3d, the abdomen was opened, and the tumor, which weighed seventeen pounds, was drawn down through an incision six inches in length, freed from its attachments and removed, together with the body of the uterus amputated near the internal os. As hemorrhage was profuse it became necessary to remove the mass very rapidly, to accomplish which the anterior attachment of the tumor was clamped and cut, when it was discovered from the escape of urine that the bladder had been opened near the fundus.

The general cavity had previously been shut off with gauze pads and thoroughly irrigated, followed by the use of hydrozone in half strength, and this, in turn, by saline solution. The gauze pads were now changed, and the opening in the bladder, four inches in length, was closed by means of two layers of chromicised catgut sutures. The wound was then disinfected, and there being a large peritoneal flap, it was attached to the bladder and made to cover the line of sutures, thus making the bladder wound extraperitoneal. After further washing out of the abdominal cavity with hydrozone and the saline solution, the external wound was closed, without drainage, and the usual dressings applied. The patient being feeble it was not thought advisable to make a vesico-vaginal fistula to drain the bladder, but, instead, a self-retaining catheter was introduced. At the end of ten days, however, tumefaction occurred over the lower angle of the abdominal wound, and, on opening it, urine began to escape. A vesico-vaginal fistula was now made in order to afford adequate drainage. The sinus in the abdominal wall was curetted and, after being thoroughly disinfected with hydrozone, its walls were sutured. Soon afterward, the sinus having closed, the sutures which kept open the vesico-vaginal fistula were removed, and the latter closed quickly without any further operative interference.

Percival (*British Medical Journal*, 1897, Vol. I., p. 1282,) reports a case of ruptured bladder on which he had operated. It was closed by means of a double wall of Lembert silk sutures. The wound in the abdominal wall was closed, after the peritoneal cavity had been

flushed out with boric acid solution and a large quantity of clots and urinous fluids had been removed. For a few days the patient did well, and then died from peritonitis. But the necropsy proved that the bladder wound had completely healed. It is the writer's opinion that had saline solution and hydrozone been used, instead of boric acid, and the abdominal wound been closed leaving saline solution in the peritoneal cavity the patient would probably have recovered.

HOT WATER DRINKING.

THERE are four classes of persons (*Indiana Lancet*) who should not drink large quantities of hot water. These are as follows:

1. People who have irritability of the heart. Hot water will cause palpitation of the heart in such cases.
2. Persons with dilated stomachs.
3. Persons afflicted with "sour stomach."
4. Persons who have soreness of the stomach, or pain induced by light pressure.

These rules are not for those who take hot water simply to relieve thirst better than cold water, and for that purpose is not to be condemned. But hot water is an excitant, and, in cases in which irritation of the stomach exists, should be avoided.—*Nashville Jour. Med. and Surgery*.

TREATMENT OF PERTUSSIS.—November *Pediatrics* contains a review of the therapeutics of pertussis by Kaumheimer in which he reports bromoform as the most satisfactory agent in relieving the frequency and severity of the spasmodic seizures and shortening the duration of the disease. Dosage—one drop for each year of age, given three and four times a day. It is best given in mucilaginous or syrupy mixtures and should always be prescribed by drops, as the fluid dram contains 480 drops, while the dram by weight, 160 drops. The susceptibility of patients varying, many cases of intoxication are reported, one fatal.—*Chicago Clinic*.

FOR PROSTATITIS.

R—Ichthyol 3i.
Ol. theobrom ʒvi.

M. Ft. suppos No. xii. Sig. Use one suppository at night and one in the morning after defecation. Under this treatment the pain, sense of pressure, etc., are said to decrease rapidly, and the hypertrophy to become sensibly diminished.—A. FREUDENBERG, *Med. News*.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges should be addressed to the editor: 284 FRANKLIN STREET, BUFFALO, N. Y.

VOL. XXXIX.—LV. JANUARY, 1900.

No. 6.

A. D. 1900.

THE beginning of a new year is always a subject for interesting comment by individuals as well as newspapers and the periodical press. It is a time for thoughtful reflection, for a considerate review of the past, a hopeful contemplation of the future—and for good resolutions seldom wholly kept. This is generally the routine channel in which the thoughts of the average person flow.

What shall be said of such a period when it also marks the commencement of a new century? Is it not a time for nations to pause and consider what each is doing, and intends to do, for the betterment of mankind everywhere throughout the universe? Is it not a time for the professions to ask themselves what they can do to advance the interests of morality, restrain crime, and improve health?

It is not our purpose at present to discuss questions of ethics, religion, law or medicine in detail; or, indeed, to do more than suggest that the profession of medicine, proud of what it has already accomplished shall put its shoulder to the wheel, and with renewed vigor, conscious of its own prowess, push forward as one man with a mighty stride toward the ideals that its hallowed mission has created for itself.

It would be interesting, at this time, to review the progress of medicine during the 19th century, that inspiration or encouragement might be obtained for the future labors that await methodical and industrious effort. But this is not feasible here, nor, indeed, is it necessary; for every intelligent physician is more or less familiar with the facts.

We have in the JOURNAL within the past year or two presented a history of medicine in Erie County for the century just ended, in

which it appears that physicians of Buffalo and its vicinity have been active participants in the work accomplished, contributing a liberal share to the general stock of medical knowledge upon continuously advancing lines.

It is more than probable that the principal work of the future will lie in the direction of the prevention of disease, and for any benefit to accrue from researches of this nature the public must look to legitimate medicine. Only thoroughly educated, well equipped and properly disciplined physicians are competent for this task. No others have ever successfully undertaken it and none ever will.

As indicating what is being done to increase longevity and prevent disease we may cite the records of the health department of Buffalo for the past ten years.

In 1890, population, 255,664, the ratio of deaths for every thousand was 19.32. The deaths from the principal infectious diseases were typhoid fever, 105; scarlet fever, 21; consumption, 498; pertussis, 16; measles, 21; cholera infantum, 348; diphtheria, 111.

In 1894, the population was estimated at 315,000, and it was a year of high death-rate from typhoid, because of the contamination of the city's water supply, a defect, however, that was speedily detected and swiftly remedied. In this year the deaths for every thousand of population were 16.76; from typhoid fever, 185; scarlet fever, 85; consumption, 500; pertussis, 73; measles, 11; cholera infantum, 417; diphtheria, 215.

Five years later—namely, in 1899, the figures were as follows: Population conservatively estimated at 370,000 (probably more nearly exact figures would be 400,000); deaths from typhoid fever, 98; scarlet fever, 31; consumption, 455; measles (epidemic), 52; cholera infantum, 187; diphtheria, 81.

The statistics here given are furnished by the registrar of vital statistics and are official. The last half of the month of December, 1899, was estimated—otherwise they are exact.

Here, then, is a steady decline in the deaths per thousand of population, notwithstanding a rapid increase in the growth of the city; besides, there has been a steady decline in the deaths from infectious or preventable diseases, the showing being particularly marked in cholera infantum and diphtheria. The first indicates the result of special attention to the city's milk supply by the health commissioner, and the second may be fairly attributed to the employment of anti-toxin.

Can anything be more convincing as to the part played by

scientific medicine in the prevention of disease? Does it not point directly to the proper relation of the state to medical education? Does it not indicate that the hope of the people rests with the best medical skill? Is it not a direct answer that puts to shame all believers in fads, isms, healers, and quacks?

The new century dawns under the influence of clearer skies; the year 1900 begins auspiciously, and we may look trustingly forward to a bright future that is steadily moving forward to crown us with daily mercies.

ENGLISH AND AMERICAN CONTRACT SURGEONS.

ACCORDING to newspaper and medical journal reports the United States is not the only country which finds itself short of medical officers in time of war. We all know how necessary it was for Surgeon-General Sternberg to supply the deficiency by employing acting assistant surgeons. Now England has been forced to supply a similar lack in a similar manner, and a large number of civilian surgeons and nurses have been sent to South Africa. The nurses were drawn from the Army Nursing Service Reserve.

The English contract surgeons are paid about the same as American contract surgeons are—£1 a day—but, whereas the American contract surgeon, by one of those elastic rulings of the Treasury department, gets \$150 per month and no allowances of any kind whatever, not even sick leave pay, the English surgeon receives about the same amount of money, a horse, and the full allowance of a captain.

At the conclusion of their service they receive two months extra pay. The English nurses receive £40 a year, with pay allowances, and £20 gratuity at the end of their service.

The English War Department has also sent three eminent surgeons to South Africa as consultants—MacCormac, Treves and Makins. These men receive \$25,000 a year. On the other hand, the United States paid Senn and other consultants \$3,000 and gave them commissions as lieutenant-colonels.

There is quite a difference here, in the treatment of surgeons, and a movement is on foot to regulate the status of American acting assistant surgeons. Surgeon-General Sternberg has prepared a bill which will give them all the allowances of a first-lieutenant and all the rights of a commissioned officer. The recently organised association of acting assistant surgeons will also present a bill fixing their status and regulating their pay and allowances.

OSTEOPATHS MUST LEAVE KENTUCKY.

KENTUCKY has once more rendered a service to humanity and the cause of legitimate medicine by pushing to successful conclusion an action in the courts relating to osteopathy. The facts are briefly as follows: Harry Nelson, an osteopath, applied for an injunction against the Kentucky state board of health, to stay proceedings against him instituted to prevent his practising medicine in Kentucky. He claimed to be a graduate of the osteopathic institution of Kirksville, Mo., which he alleged was a reputable school.

The state board of health having investigated the Kirksville institution by a special committee sent there for that purpose, denied that it was a reputable school of medicine. It appears that the authorities in control at Kirksville have erected a good building, and expended large sums of money to foist their deceptive scheme upon an unwary public.

Judge Sterling B. Toney, before whom the case was tried, held that there were but two points at issue; first, the constitutionality of the act to protect citizens from empiricism; and, second, whether the Kirksville school was a reputable institution. He said the word reputable was not used here in its ordinary sense as when applied to individual character, but that it included a broader meaning as to the standing of the school among educational institutions, and whether it could register with the state boards as a legally qualified medical school.

Judge Toney's opinion embraced a full review of the case and the essential points may be summarised as follows:

As to the first question, Judge Toney held that the act was constitutional, quoting a number of state and federal decisions in support of his position. As to the second, whether or not the Missouri institution was a reputable medical college, one of good standing, he ruled that this was a question of fact to be decided by the State Board of Health; that that board had instituted a careful investigation of this matter, appointing a special committee to do this, and that as a result of this investigation it had decided that the Missouri School was not a reputable medical college, although legally chartered under the laws of that state. The board's decision on this question of fact Judge Toney held was final and conclusive, and was not a matter for judge or jury to pass upon. The injunction was refused and petition dismissed.

The state board of health regards the decision as effective in removing the last obstacle to freeing the state from the only remaining relic of quackery within its borders. It is to be regretted that the lawyers and courts of New York have not been as efficient in this work as they have been in Kentucky. Here it is difficult to inspire a lawyer with courage and enthusiasm sufficient to bring action, or to

secure conviction when issue is made, or the courts to sentence when conviction is obtained. In Kentucky the bench and bar and all people of education are loyal to legitimate medicine, and desirous of maintaining its purity and high standards.

ACTING ASSISTANT SURGEONS, U. S. ARMY.

THE Association of Acting Assistant Surgeons, U. S. A., was organised at a meeting held in New York on December 5, 1899. The main object of the association is to secure from congress legislation which will give acting assistant surgeons all the benefits they were promised when contracts were made.

The Treasury Department has ruled that they are entitled to \$150 per month and no more, thus cutting out the extra pay received by volunteer officers and enlisted men. When sick and on leave they have not received pay. All agreements made by Surgeon-General Sternberg were thus practically annulled by the Treasury Department decisions. Dr. Sternberg has done and is doing all in his power to regulate this, and has drawn up a bill to give volunteer surgeons the pay due them according to their rank, and are regulating the status of acting assistant surgeons.

The meeting was well attended, harmonious, and the following officers were elected: President, Azel Ames; vice-presidents, Timothy Leary, A. R. Jarrett, T. B. Buffom; secretary, J. P. Warbasse, of Brooklyn, treasurer, Charles W. Brewer; historian, W. S. Terriberry. A legislative committee was also chosen.

THE new ordinance recently adopted by the Common Council of Buffalo, and which has so disturbed the faith healers, reads as follows:

Any person professionally or otherwise in attendance upon or in charge of any person suffering from any infectious or contagious disease, in case a regularly qualified physician has not been called to attend, shall immediately report the existence of such disease and the name and address of the patient or person suffering therefrom to the Board of Health. This section is intended to include any person in whose house or home such patient or sick person may reside.

Surely every good citizen will willingly comply with such a reasonable measure, which is projected and enacted in the interest of the people.

A MEMORIAL tablet to Dr. George H. Rohé is to be erected by the memorial committee of the Maryland Public Health Association. It will be a bronze portrait tablet to commemorate the life and public services of this distinguished physician. It will be placed either in the hall of the Medical and Chirurgical Faculty of Maryland, or at the Springfield Asylum for the Insane, an institution which was erected and organised under the supervision of Dr. Rohé.

THE Medical Council of the State of Pennsylvania decided on May 24th, that the practice of osteopathy within the state is illegal, and that those therein engaged are amenable to the law.—*Columbus Med. Jour.*

THE annual report of the board of managers of the Craig Colony, for the care of epileptics, located at Sonyea, N. Y., has been submitted to the State Board of Charities.

From statistics it is learned that since the opening of the colony on February 1, 1896, 504 epileptics have been received, of which 378 remain. When the new buildings, now in the course of construction, are completed the capacity of the colony will be increased to a total of 720 beds. These will be filled as soon as they are ready and there will still remain some hundreds of epileptics in almshouses, hospitals and outdoor departments of dispensaries throughout the state.

During the last year 95 new cases were admitted to the institution, 40 men and 55 women. Thirty-nine were discharged, leaving 378 in the institution on October 1st, a total gain of 56 during the year. The death-rate for the last year has been very low, less than 2 per cent., the lowest in the history of the colony. Four insane persons were transferred to state hospitals.

THE Supreme Court of the State of Iowa, in a recent decision, holds that the State Board of Medical Examiners has the right to revoke the certificate of a physician if it thinks him incompetent to practise.

THE complete suppression of typhoid fever in Berlin, may be regarded as a remarkable sanitary achievement. That it has been accomplished through the perfect filtration of the city's water supply, is a commentary on the imperfections of the systems and sources of water supplied to many American cities. It is to be hoped that Buffalo will put itself abreast of Berlin in this matter without unnecessary delay.

THE state care of consumptives was considered at a meeting of a special committee of the State Board of Charities, held at Rochester, December 2, 1899. The members of the committee present were Dr. E. V. Stoddard, of Rochester, and Mr. Harvey W. Putnam, of Buffalo.

The committee was addressed by Drs. John H. Pryor, Henry R. Hopkins and William H. Heath, of Buffalo; Dr. A. M. Veeder, of Lyons; Dr. G. W. Goler, of Rochester, and Messrs. Frederic Almy and Lafayette Long, of Buffalo, all favoring a well matured and effective plan of state care. It is hoped that the committee will report favorably upon the subject.

THE medical profession and the public in general are to be congratulated upon another conviction obtained in Buffalo for the illegal practice of medicine. It appears that Ferdinand Szymanski was tried recently before Justice Kenefick on the charge of illegally practising medicine. The complaint upon which he was indicted was made last autumn by Dr. J. B. Coakley, chairman of the board of censors of the Medical Society of the County of Erie. The indictment alleged that Szymanski, not being a licensed physician in this country, had administered medicine to and prescribed for Charles S. McDowell, of No. 805 Fillmore Avenue and others.

District-Attorney Penny presented three witnesses. McDowell testified that Szymanski had given him powders for stomach trouble. James Hopkins, who was with McDowell at the time, corroborated that testimony. William Chase testified that Szymanski had diagnosed his case as one of rheumatism and had given him powders and a prescription on which to obtain other medicine.

Szymanski, in his own defense, declared that he was a licensed physician in the old country. The jury brought in a verdict, finding him guilty as charged in the indictment, but recommending leniency. Justice Kenefick suspended sentence on account of the age and poverty of the defendant.

THE need of more medical officers in the army has prompted Surgeon-General Sternberg to prepare a bill for presentation to congress providing for the addition to the corps of four assistant surgeon generals with the rank of colonel, ten deputy surgeon generals, with the rank of lieutenant colonel, thirty surgeons with the rank of major and eighty assistant surgeons with the rank of first lieutenant, who shall have the rank of captain after five years of service. It is pro-

vided that the vacancies thus created in the grade of colonel, lieutenant colonel and major shall be filled by seniority promotion in accordance with established laws and regulations. Acting assistant surgeons to the number authorised are to be appointed, subject to the usual examination, for a probationary period of six months, during which they will attend the Army Medical School in Washington. At the expiration of this time, if their standing is good, they are to be commissioned to fill existing vacancies.

This probationary service is waved in the case of candidates who have rendered satisfactory service as acting assistant surgeons or as commissioned medical officers in the Volunteer Army for six months or more, who may be commissioned at once on passing a satisfactory examination as to their physical, moral and professional qualifications.

EYESIGHT in childhood is a subject that deserves the closest attention by parents, guardians and physicians. The *New York Tribune* in a recent issue has printed the following :

An eminent German specialist in this line, Dr. Cohn, has found that the number of nearsighted or myopic pupils shows an increase in every school from grade to grade, and this he attributes to improperly adjusted desks. This progressive increase, according to Dr. Rogers, of Buffalo, N. Y., a close investigator of the subject, is the case in the United States also, and he especially condemns the carelessness with which parents allow their children to begin study without any test of their vision, so that a slight defect is often allowed by neglect to grow into a serious one. In commenting upon this Dr. Rogers lays down the rule that the eyes of all children should be tested before admission as pupils, and if the vision proves to be much below the normal, admission should not be granted until professional counsel has been sought and a certificate meeting the case presented. The same rule, too, should apply to children with inflamed eyes, who should not be admitted until a physician's certificate of the noninfectious nature of the disease is presented.

PERSONAL.

DR. LEONARD WOOD, Major-General U. S. Volunteers, formerly military Governor of Santiago de Cuba, has been assigned to the command of the division of Cuba, relieving Major-General John R. Brooke, U. S. Army.

Maj.-Gen. Wood will, in addition to his duties as division commander, exercise the authority of military governor of the island.

Gen. Wood on his arrival at Havana, December 20, 1899, was given a warm reception by officials and inhabitants. Salutes were fired, bunting displayed, rockets sent up, bands played and official visits exchanged. A new era for Cuba appears to be dawning under the administration of the new Governor-General.

DR. F. W. MCGUIRE, of Buffalo, has moved his office from 158 Northland Avenue, to 1540 Main Street, over Kingston's drug store. Hours: 8 to 9 a. m., 2 to 3, and 7 to 8 p. m. Residence, 158 Northland Avenue. Telephone.

DR. FREDERICK H. MILLS, of Buffalo, having completed his duties as acting assistant surgeon, United States Army, announces his return to practise, with office at No. 724 Main Street.

Dr. F. P. BINGHAM, of Buffalo, who has for some time been at the Fitch Hospital as assistant house surgeon, has become a member of the staff of the German Deaconess's Home.

DR. EARL P. LOTHROP, of Buffalo, who has been seriously ill from blood poisoning has so far recovered as to give promise of his early return to practice.

OBITUARY.

DR. W. E. ROBBINS, of Hamburg, N. Y., died at his residence December 5, 1899, aged 39 years. His sudden death was a great shock to the community where he lived. He had been ailing for several days previously, but no serious results were anticipated. His friends, the neighboring physicians, Drs. C. W. and B. S. Bourne, called to see him the morning of his death and while conversing with them he was taken with a convulsion and almost immediately expired.

Dr. Robbins was born in Iowa, on November 7, 1860; he came with his parents to Erie County when a small boy, the family settling in North Evans. There he lived until he entered the University of Buffalo, graduating with the class of '85. His standing in the profession had become high. He was conscientious in the discharge of

his professional duties, and he acquired a large practice, especially in the southern part of the county. He was a member of the staff of the Erie County Hospital, and was a member of various medical societies. He had been health officer of the town of Hamburg and held a like position in the village at the time of his death.



W. E. ROBBINS, M. D.

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Dr. Robbins was identified with every public movement in his village and had the highest esteem of all its residents. He was a member of the Royal Arcanum and was senior warden of Fraternal Lodge, F & A. M., which body conducted the funeral services on Friday morning, December 8th, at 10 o'clock, preceded by a short address by the Rev. D. W. Jones. He is survived by a widow, two daughters, his father and four sisters.

DR. ANDREW J. VOLKER, of Buffalo, U. of B., '92, died at his residence in this city, December 11, 1899, aged 28 years. Dr. Volker was a young man of promise and his early death is deeply lamented.

DR. HENRY HODGEN MUDD, of St. Louis, Mo., died at his residence in that city November 20, 1899, aged 55 years. Since the death of his uncle, Dr. John T. Hodgen, Dr. Mudd has been recognised as the leading surgeon in the southwest, and his loss is great to St. Louis and vicinity.

At the time of his death he was dean of the medical department of Washington University and professor of surgery in that institution. He is survived by his father, two brothers and four children.

SOCIETY MEETINGS.

THE Niagara Falls Academy of Medicine held its regular monthly meeting at the office of Dr. C. O. Leo-Wolf, Silberberg Block, Monday, December 4, 1899, at 8.45 p. m. Dr. Leo-Wolf read a paper on Tubercular arthritis, its pathology, diagnosis and treatment. The discussion was opened by Dr. T. J. McBlain.

THE Lake Erie Medical Society held its regular quarterly meeting at Dayton, N. Y., December 21, 1899.

The officers are: President, B. S. Bourne, Hamburg; vice-president, W. R. Henderson, Buffalo; secretary-treasurer, F. C. Beals, Salamanca; program committee, B. S. Bourne, Hamburg; F. C. Beals, Salamanca.

The following program was presented: Neurasthenia, W. J. French, Hamlet; Surgical knowledge of the prostate, E. J. Meyer, Buffalo; Valvular heart disease, H. C. Buswell, Buffalo; Thoughts on Bad-Nanheim, Germany, and its treatment of heart disease, M. B. Shaw, Eden.

THE thirteenth International Medical Congress will be held at Paris, August 2-9, 1900. All doctors of medicine are entitled to membership in this congress by making a proper application and paying the sum of \$5.00. The method of procedure is to fill out a blank, designate the section in which he desires enrollment, and send it with his visiting card and \$5.00 to Dr. Henry Barton Jacobs, secre-

tary, 3 West Franklin Street, Baltimore, Maryland. The secretary will forward it to Paris and the applicant will receive a certificate in due time. Rules and regulations governing the congress will be mailed upon application to the secretary. The committee hopes that the American representation in this important medical congress may be as large as possible and every member of the profession is urged to enter his name for membership, this alone entitling him to receive a digest of the full proceedings of the congress and a printed report of the section to which he may choose to attach himself.

THE Buffalo Academy of Medicine held meetings during the month of December, 1899, as follows :

Section on Surgery.—Tuesday evening, December 5th. Program: The value of normal salt solution in surgery with abstracts of cases, Chauncey P. Smith; Hypertrophy of the prostate, C. F. Durand; Dessicated suprarenal capsule in acute coryza, Frederick H. Millener.

Section on Medicine.—Tuesday evening, December 12th. Program: The relation of indicanuria to secretion of hydrochloric acid, Allen A. Jones. Personal experience with new drugs—General discussion.

Section on Pathology.—Tuesday evening, December 19th. Program: Meckel's diverticulum, with exhibition of specimens, Irving M. Snow; discussion opened by John Parmenter. Pathology of middle ear requiring radical treatment, George F. Cott; discussion opened by Max Keiser.

Section on Obstetrics.—Tuesday evening, December 26th. Program: Subject unannounced, Charles E. Congdon; The difficulties a young doctor encounters in obstetric practice, Nelson W. Wilson.

THE Medical Society of the State of New York will hold its ninety-fourth annual meeting at Albany, Tuesday, Wednesday and Thursday, January 30, 31 and February 1, 1900. The president, Dr. Willis G. Macdonald, of Albany has appointed the following business committee to whom all communications concerning papers to be presented at the next annual meeting should be sent. Dr. Wendell C. Phillips, 350 Madison Avenue, New York; Dr. Henry L. Elsner, Syracuse; Dr. Chauncy P. Biggs, Ithaca.

THE seventy-ninth annual meeting of the Medical Society of the County of Erie will be held at the Y. M. C. A. building, corner of Mohawk and Pearl Streets, at 9 o'clock a. m., January 9, 1900. The following program has been prepared: Water supply and sewer problem of Buffalo, by the President, J. B. Coakley. The diagnosis of tumors of the breast—its importance, Chauncey P. Smith; Neuroses of childhood, Maud J. Frye; Unusual condition of the skin and kidneys following an operation for appendicitis, Wm. G. Taylor; Cardiac disease, Henry C. Buswell; Illegal medicine, Nelson W. Wilson.

This excellent list of papers would seem to justify the expectation of a full attendance, which the officers respectfully urge.

A change in the place of meeting should be noted and an earlier hour than usual has been named on account of the length and importance of the program.

THE Buffalo Academy of Medicine has established a new section which embraces the study of diseases of the eye, ear, nose and throat. The organisation was perfected Monday evening, December 11, 1899, at which time officers were elected and a program arranged for the year. Dr. W. S. Renner was chosen as chairman, and Dr. R. H. Satterlee, as secretary. The meetings of the section will be held at the Academy parlors on the second Monday of each month, at 8 o'clock p. m. Dr. M. D. Mann, the president of the Academy, advocated the establishment of the section in a convincing speech, in which he said that it would tend to broaden the scope and increase the usefulness of the Academy.

THE Southern Surgical and Gynecological Association held its twelfth annual meeting at New Orleans, December 5, 6 and 7, 1899, which was in all respects a conspicuous success. The president, Dr. Joseph Taber Johnson, of Washington, conducted the affairs of the association with great skill and dignity, the attendance was large and enthusiastic, the papers and discussions were able and of high order, the weather was beautiful, and everything seemed to conspire to make the occasion enjoyable and instructive.

The Orleans Parish Medical Society entertained the visitors at luncheon at the Boston Club on Tuesday, and provided an excursion down the Mississippi to a famous sugar plantation on Wednesday. The French Opera was open to the association Tuesday evening,

where the Huguenots was most admirably sung, and the Tulane Theater kept open doors to members on Thursday evening.

It was altogether a rare treat to attend the meeting and will not soon be forgotten by those present.

Dr. Ernest S. Lewis, chairman of the committee, and his able lieutenants, Drs. W. E. Parker and Isidore Dyer, were everywhere in evidence and deserve great credit for the manner in which the association was entertained.

Officers were elected as follows: President, A. M. Cartledge, Louisville; vice-presidents, Manning Simmons, Charleston and W. P. Nicholson, Atlanta; secretary, W. E. B. Davis, Birmingham; treasurer, W. D. Haggard, Jr., Nashville. The next meeting will be held at Atlanta, beginning the second Tuesday in November, 1900.

COLLEGE AND HOSPITAL NOTES.

THE new City Hospital was formally opened at Owensboro, Ky., Thanksgiving Day, November 30, 1899. It was made an important event in that city, the dedication services having occupied the day and evening.

The opening service occurred at the buildings in the morning, where a committee received visitors from 9 to 11 a. m. and from 2 to 4 p. m. It was estimated that over 2,000 persons visited the buildings during the day.

The dedication services proper took place at Temple Theatre, beginning at 7.30 p. m. Every seat of the opera house was filled and many went who could not be seated. The services were opened with prayer by Rev. E. E. Smith, followed by an address on the History of the institution, by Mayor W. P. Small. Dr. C. H. Todd then introduced Dr. L. S. McMurtry, of Louisville, the chief speaker of the occasion, and who made the dedicatory address. It was a graceful speech and most appropriate to the occasion.

After the close of the services at the Temple Dr. McMurtry was entertained at luncheon at the Rudd House by Mayor Small, other city officials, hospital officers and citizens.

The buildings and grounds cost about \$18,000. The grounds cost \$7,000 and were presented to the city by the German School Association for hospital purposes, and the city and German School Association will jointly operate the hospital. Several hundred dollars

were contributed toward equipping the buildings by some of the local fraternal societies. The main building is a handsome brick structure, and is one of the best equipped hospitals in the south. There are three rooms fitted up for patients who are able to pay and several wards for indigent patients. It has an elevator and the operating room is fitted up with all improved appliances.

A CHILDREN'S hospital has lately been built on the grounds of the Charity Hospital at New Orleans, which is one of the most complete hospitals of its kind in the country. It was projected, built, equipped and furnished by Mrs. Richard A. Milliken as a memorial to her husband and daughter. Mr. Milliken, the wealthy Louisiana sugar planter, received injuries about four years ago in a street railway accident from which he died, and Miss Milliken, aged 19 years, was drowned at Bar Harbor, Me., in the summer of 1888.

The hospital is four stories high, contains 175 beds, arranged in separate medical and surgical wards for boys and girls. It has surgical operating rooms, bath rooms, lavatories, and all accessories constructed according to the most approved plans as to plumbing, marble wainscoting, tiling and ventilation. Besides it has a kindergarten where convalescents and invalids can be entertained and instructed. Its total cost as it now stands was about \$125,000 and it is a noble monument of philanthropic charity, admission to its wards being absolutely free.

SISTER M. FLORENCE, who for twenty-five years has had charge of the Sisters' of Charity Hospital, at Buffalo, has been transferred to the mother house at Emmittsburg, Md. Sister Cynerine, also with the same hospital for seventeen years, has been placed in charge of St. Mary's Hospital, at Detroit, Mich. Two Sisters from Emmittsburg take the places made vacant by the transfer of Sisters Florence and Cynerine.

It is a matter of considerable surprise that no provision for nursing students temporarily ill has been made heretofore in our colleges. Mrs. Edward Storrs Atwater, of Poughkeepsie, appreciating this need at Vassar, has given money for an infirmary. It is to be a memorial of her father, Charles W. Swift, for many years a trustee of the college. It is expected that only the foundations of the building will be laid this winter, but the infirmary will be completed and ready for occupancy next autumn.

HON. D. S. ALEXANDER, M. C., introduced in the House of Representatives, December 11, 1899, a bill providing for the proposed Marine Hospital at Buffalo.

The measure calls for an expenditure of \$125,000. It was referred to the committee on public buildings and grounds and the plan is to submit it to the Secretary of the Treasury for his inspection and any suggestions he may have to offer. It authorizes the Secretary of the Treasury to pursue precisely the same course in obtaining a site as is pursued in the case of a post office building. It is desirable that the hospital shall be located near the center of Buffalo.

Book Reviews.

GENERAL PATHOLOGY, OR THE SCIENCE OF THE CAUSES, NATURE, AND COURSE OF THE PATHOLOGICAL DISTURBANCES WHICH OCCUR IN THE LIVING SUBJECT. By Dr. ERNST ZIEGLER, Professor of Pathological Anatomy and of General Pathology at the University of Freiburg, in Breslau. New York: William Wood & Co. 1899.

The American translation of the ninth revised German edition of Ziegler's pathology is before the profession and is a magnificent work from every point of view. Under the able editorship of Dr. Albert H. Buck, assisted by a competent corps of translators—each in himself an expert pathologist—a work has been brought forth that must maintain the high standard of excellence that Ziegler holds in America. The temptation has been great to substitute a compend of pathology for the classical text-book, which has so long been such a valued addition to the student's and physician's library, but happily Professor Ziegler did not yield and medicine has been enriched thereby. Many important changes were made in the eighth edition, chapters rewritten, new illustrations added and important scientific investigations and researches incorporated. The changes in the ninth edition are not so numerous, but yet important. The chapters on retrograde disturbances of nutrition and infiltrations of the tissues, and that on tumors have been entirely rewritten. In the former, the different kinds of degeneration which lead to the formation of hyaline products are divided into four groups, giving good or general ideas of the different processes under consideration. The chapter on pigmentation has been augmented by some general remarks on the pathological absence of pigment, in which the author takes up for consideration albinism, vertigo and leukoderma.

Chapter VII. on tumors has also been largely rewritten. Ziegler now divides tumors into three large groups: (1) tumors of the connective tissue; (2) epithelial tumors; and (3) teratoid tumors

and cysts. The epithelial tumors have been divided into two lesser groups, in one of which the papillary epitheliomata, the adenomata and the cystoadenomata are to be placed, while in the other belong the carcinomata and the cystocarcinomata. The author still holds to his former theory regarding the nature and origin of tumors, notwithstanding the many attacks made upon him. Ziegler establishes and groups the tumors according to origin: (1) those which arise from some localised predisposition of the tissues of a distinctively congenital nature; (2) a second group is developed after traumatic injuries of the tissues. In a third group of cases the development of the new growth follows an inflammation, especially if accompanied by ulceration and the formation of a scar. The tumors of the fourth group seem to owe their development to the unequal atrophy of the elements which make up a tissue, as a result of which certain opposing forces are removed or lessened. Our knowledge of the cause of tumors up to the present time may be thus summed up: hereditary and acquired conditions of certain cells and cell groups, which express themselves in a tendency to increased formative activity and to the production of atypical tissue lead to the formation of tumors. Ziegler is decidedly not of the opinion that cancer is a parasitic disease. Thus, he says, in the few cases in which genuine parasites have been found in the tissues, they may perfectly well have entered after the tumor had begun to develop. Under such circumstances they can in no sense be looked upon as the cause of the development of the carcinoma. Of the many so-called parasites described, he says they are nothing but degenerated nuclei and karyokinetic figures, or leucocytes (or the products of their destruction) which have been included in tumor cells or products of the cell-protoplasm, especially keratohyalin and colloid. Ziegler further states that "there are three facts which mitigate against the idea of a parasitic origin for these tumors. First, no parasites can be demonstrated in the beginning of the cancer development; second, the whole course of the disease is quite different from that of the epithelial growth produced by parasites, and, third, the formation of metastatic tumors is due, beyond all question, to the transportation of cancer cells." These views of this eminent and thorough pathologist are somewhat contrary to the view accepted by many other eminent and thorough pathologists, that cancer is a parasitic disease. Fortunately, the controversy may soon be settled by the definite announcement of the discovery of the microörganism of cancer, or quelled for the time being by failure to detect a parasitic growth.

Chapter VIII., on disturbances of development and the resulting malformation, is an interesting section and fully illustrated. Chapter IX. deals with fission fungi which exist as parasites and the diseases caused by them. Chapter X. treats of the mould and yeast fungi, and Chapter XI. treats of the various parasites which infest the human system. A very complete general index adds much to the value of the work. The illustrations, 544 in number, many in colors, some full-page colored plates, are all excellent, well chosen,

finely executed and well described. As a text-book and work of reference this ninth edition will maintain its undisputed claim to professional favor and popularity.

W. C. K.

A TEXT-BOOK OF DISEASES OF THE NOSE AND THROAT. By D. BRADEN KYLE, M. D., Clinical Professor of Laryngology and Rhinology, Jefferson Medical College, etc., etc. Octavo, pp. 646, with 175 illustrations, twenty-three of them in colors. Philadelphia: W. B Saunders. 1899.

This work has both the advantages and disadvantages of a single authorship, but if it has less of the many-sided views of manifold authorship it has the convincing quality of earnest individual opinion. The author brings to the study of his special field a broader pathological knowledge than is shown by many writers upon the same theme. Diseases of the nose and throat are so involved with general diseased conditions, that a grasp of general pathological principles is essential for a reasonably clear understanding of their etiology and principles of treatment. Too often this broad basis for special study is wanting in text-books relating to laryngology. Dr. Kyle frequently illustrates local pathological conditions by reference to well known postmortem observations on more accessible organs. Numerous cuts of original or well selected specimens illustrate the pathological anatomy of the conditions described. Indeed the excellent description of the pathology of diseases of the throat and nose constitute the chief value and originality of the work. The style and language of the author are not always as good and clear as they should be to convey the thoughtful ideas they embody. The topical treatment he advises is usually excellent, but his description of surgical procedures often lacks clearness and sufficient minuteness of detail and at times is of an academic rather than a practical character.

The arrangement of subjects are based on pathological as well as anatomical relations, and the analysing captions of chapters are excellent and enable the student readily to classify his acquired information. Most of the chapters on the various diseases will repay careful reading. The pathology of syphilis is admirably and succinctly given. Special stress is laid on the necessity for long continued treatment after the last active manifestation of the disease. The author is properly conservative in his discussion of "nasal reflexes" about which so many untenable statements have been made. Neoplasms of the respiratory tract are well classified and described. That benign growths may become malignant under irritating treatment is repeatedly mentioned. This may well be borne in mind by numerous rhinologists. Diseases of the septum are interestingly described and various methods of treatment are given with much completeness. No mention is made, however, of the frequency with which nasal obstruction in septal deflection is due largely to the accompanying thickening of the convex side of the septum. In a majority of cases a sufficiently patulous nasal cham-

ber can be secured by the removal of this redundancy, without resort to fracture and resetting of the septum.

An important chapter is devoted to diseases of the accessory sinuses of the nose, illustrated by cuts of well chosen sections of the head, some of them original. The author underestimates the value of frontal transillumination as an aid to diagnosis. It is of decided value as an aid to diagnosis of empyema of the frontal sinus, though the various modifying conditions, alluded to by Dr. Kyle, detract from its exactness. The pathology and symptoms of the various sinus diseases are well described. The description of the required operative procedures is indefinite and unsatisfactory and no mention is made of Luc's operation for antral empyema by which drainage is secured through the nasal wall.

The diseases of the lymphoid structures of the pharynx are well considered and illustrated, though we must take issue with Dr. Kyle's positive statements about the effects of habitual mouth-breathing upon the development of the maxillary bones. The adenoids seem to us to have a concomitant rather than a causal relation to the maxillary deformity. Perhaps the greatest defect in this excellent work is the failure to lay emphasis upon the importance of the hypertrophied pharyngeal tonsil as a cause of deafness and recurring earache in children. It is necessary to impress students of medicine with the great frequency with which adenoid disease is a cause of ear disease. This is true not only of the acute ear diseases of childhood, but of intractable impairment of hearing in later life when the diseased lymphoid tissues may have entirely atrophied. The mischief, preventable by prompt treatment in early life, may easily terminate in incurable deafness in middle life. The danger of chloroform anesthesia in the adenoid operation is not mentioned, though the frequency with which deaths have been reported from this cause within the past five years warrant some attention. Diseases of the larynx receive proper attention, but in that subordinate degree that indicate their usual relation to diseases of the higher portion of the air tract.

The publishers have given the book convenient size, clear print, and free illustration, and its appearance predisposes to that favor which examination of its contents confirms. We can recommend Dr. Kyle's book to all medical men interested in the diseases of which it treats.

THE NERVOUS SYSTEM AND ITS CONSTITUENT NEURONES. Designed for the use of practitioners of medicine, and of students. By LEWELLYS F BARKER, M. D., Associate Professor of Anatomy in the Johns Hopkins University, and Assistant Resident Pathologist to the Johns Hopkins Hospital. With two colored plates and 676 illustrations in the text. Octavo, pp. 1122. New York: D. Appleton & Co. 1899.

This work represents the results of long and careful study and scientific research in the anatomy, histology and physiology of the nervous system in man. It is, moreover, a subject which has since the

beginning of scientific records, occupied the minds of thoughtful physicians and observers the world over. Within the last decade a complete revolution in our ideas concerning the elements of the nervous organs has taken place and as a result new methods of investigation have been discovered, new avenues of research have been opened up, problems hitherto thought unsolvable have been solved and the key to the whole intricate subject, the neuron theory, been promulgated and accepted by the great majority of thinking men, active in the domain of neuro-anatomy and neuro-histology.

The author began his work some two years ago in a series of articles running in the *New York Medical Journal*, in which an attempt was made to present, in as simple and concise a manner as possible, the main facts concerning the newer investigations into some phases of the anatomy and physiology of the nervous system. Those who fortunately read those articles will be pleased to know that they form hardly more than an introduction to the present volume and the body of the book dealing with the groups of neurones, whose axones constitute the principal known tracts in the nervous system—centripetal, centrifugal and associative—is now published for the first time.

The neurone is defined to be the nervous cell in its entirety; its central mass branches and connections by which the vital matter of the nerve cell is connected with the vital matter of all other vital cells, the branches being designated dendrites, and connecting structures axis-cylinders or axones. The purpose of the author in this work is to show the actuality of such structures, and that the whole nervous system consists of the grouping of neurones.

The opening chapter is devoted to the history of the development of the neurone concept in which appear the labors of the early neuroanatomists Schwann, Golgi, Deiters, Waldeyer, Forel, His and the brilliant later researches of Ramon y Cajal with the Golgi method. It is a curious fact that the method to which the whole modern fabric of the neurone is due was unused and neglected for more than twelve years after its discovery by Golgi in 1873. Since then it has produced results in the hands of expert observers, most important and path-making in the science of neurology.

Section II. takes up the external morphology of the neurones, describing minutely and carefully the external form of the cell body and of the dendrites; the external form of the axis cylinder processes or axones and the collaterals, side fibriles, and interneuronal substances. The methods of Weigert, Nissl, Apáthy and Held have done much to unravel the mysteries of the finer anatomy of the neurone components and their importance is given due consideration by the author in these pages.

Section III. is devoted to the internal morphology of neurones. In this department perhaps the greatest improvements and discoveries have been made and to those who desire to be abreast of the times this chapter will be interesting reading. The status of our knowledge about the internal structure of the protoplasm may be summed up as

follows: A neurone is made up like other cells of nucleus, and protoplasm. In the latter a centrosome and a so-called attraction sphere are present. The protoplasmic portion of the cell can be divided into a peripheral exoplasmic and a central endoplasmic portion. In neurones as in muscle cells there is a tendency to a fibrillary structure. In both exoplasm and endoplasm there can be made out a more or less homogeneous ground substance in which are deposited larger and smaller masses of a granular nature. The ground substance corresponds to the "unstainable substance" of Nissl, and the masses of granules to the stainable substance of Nissl and the pigment.

Then follow chapters on the histogenetic relations of the neurone as a unit in physiological and pathological processes and the grouping and chaining together of neurones in a complex nervous system, like that of man and higher animals.

Too much cannot be said in commendation of this work. It will be greeted with pleasure by everyone who desires to understand the phenomena of life and the wonders of the nervous system; that structure of the living organism that connects all the living parts of the body and makes it a consistent and harmonious whole.

The illustrations, very profuse and elegant, show such a connection and grouping and make clear how the living cells of every organ take part in the operation of life throughout the organism.

On the whole the work is worthy of the highest praise and commendation, well written carefully worded, free from misspelled proper names and is surely a credit and honor to American neurology.

The publishers have done their work so well that any praises would be superfluous.

W. C. K.

A TEXT-BOOK OF PHYSIOLOGY. By WINFIELD S. HALL, Ph. D. (Leipzig), M. D. (Leipzig), Professor of Physiology, Northwestern University Medical School, Chicago; Member of the American Physiological Society; Fellow of the American Academy of Medicine. Octavo, 671 pages, illustrated with 343 engravings and six colored plates. Philadelphia and New York: Lea Brothers & Co. 1899.

The aim of Dr. Hall in presenting this new text-book for professional favor is to supply the student with a concise statement of the essential facts of physiology, together with the relevant facts derived from chemistry, physics and morphology. In the introduction, he summarises those principles of chemistry and physics which have a general application to physiology, and to each chapter prefixes an abstract of the facts drawn from all three of the basic sciences which are to be applied in the succeeding text. His plan has been to adapt the work to the needs of medical students, and to students in literary and scientific institutions who are preparing for the study of medicine or of physiology as a specialty.

The work is divided into two parts. Part I. treats of general physiology, including the physiology of the cells and the physiology of contractile and irritable tissues, and Part II. deals with special

physiology, which is sub-divided into three divisions—namely, (a) nutrition; (b) moto-sensory activities; (c) reproduction. Under these general divisions is embodied the consideration of circulation respiration, digestion, absorption, metabolism, excretion, physiology of the dermal system, sensation (including the special senses), physiology of the nervous system, physiology of the muscular system and reproduction. The style is brief and concise, but the subjects seem to be as fully covered as the requirements of the student demand. The recent advances in physiology have been duly presented and those pertaining to the anatomy and physiology of the nervous system are of special interest. The work appears to be well suited to the purpose for which it is designed and it is to be heartily commended to the students.

PROGRESSIVE MEDICINE. Volume III. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by HOBART AMORY HARE, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, handsomely bound in cloth, 440 pages, eleven illustrations. Philadelphia and New York : Lea Brothers & Co.

The volume under consideration presents carefully prepared and exhaustive papers upon the following subjects: Diseases of the thorax and its viscera, including the heart, lungs and bloodvessels, by William Ewart, M. D., F. R. C. P., physician and joint lecturer on medicine, St. George's Hospital, London. Diseases of the skin, by Henry W. Stelwagon, M. D., clinical professor of diseases of the skin, Jefferson Medical College, Philadelphia. Diseases of the nervous system, by William G. Spiller, M. D., professor of diseases of the nervous system in the Philadelphia Polyclinic. Obstetrics, by Richard C. Norris, M. D., instructor in obstetrics, University of Pennsylvania, Philadelphia..

The aim of the editor and publishers of this series is to offer a well arranged, original, condensed abstract of the practical advances made in each department of medicine during the period covered by the digest. How well they have succeeded can only be determined by a careful examination of the books as they appear. In the present instance we must admit that there is great satisfaction in inspecting the work done by each contributor, and this in spite of a prejudice against works of this sort in general.

"Progressive Medicine" has not only overcome these prejudices but compels our unqualified approval and admiration.

A COMPEND OF GYNECOLOGY. By WILLIAM H. WELLS, M. D., Adjunct Professor of Obstetrics and Diseases of Infancy in the Philadelphia Polyclinic; Instructor of Clinical Obstetrics in the Jefferson Medical College, etc. With illustrations. Philadelphia: P. Blakiston's Son & Co. 1899.

A compend of gynecology, by William H. Wells, in Blakiston's series of quiz compends, is one of the best of that class of books.

Its teaching is for the most part accurate and up-to-date, and the style is so clear that the book will be found very helpful to the student who wishes when preparing for examination to give the subject of gynecology a brief general review.

M. J. F.

KIRKE'S HANDBOOK OF PHYSIOLOGY. Fifteenth American edition. Revision by WARREN COLEMAN, M. D., Professor of Physiology in the Woman's Medical College, New York, etc., and CHARLES L. DANA, A. M., M. D., Professor of Nervous and Mental Diseases in the New York Post-Graduate Medical School, etc. One volume, 856 pages, 8vo. Profusely illustrated by 516 wood-engravings in black and colors, and by chromo-lithographic plate. New York: William Wood & Co.

The fact that Kirke's Handbook of physiology is in its fifteenth edition is sufficient comment on the value and popularity of the work. It has always been one of the favorite college text-books. It is regrettable that a book of such acknowledged value should be marred by certain easily corrected defects. The reviser has failed to change page references and the addition of new matter has so enlarged the book that these references to other portions of the work are valueless. In one or two instances carelessness in incorporating new material quite destroys the sense of a paragraph. Many of the plates are so old that their use obscures rather than elucidates the text, it being impossible to learn anything from a dark and hazy picture, which is little more than a blur.

On the other hand, it is but fair to say that many new plates, clear and valuable, have been added, that the type and paper leave nothing to be desired from a mechanical point of view, and that the revision brings the book up to the present day knowledge of this subject.

ANNUAL AND ANALYTICAL CYCLOPEDIA OF PRACTICAL MEDICINE. By CHARLES E. DE M. SAJOUS, M. D., and 100 associate editors. Assisted by corresponding editors, collaborators and correspondents. Illustrated with chromo-lithographs, engravings and maps. Volume IV. Infants, diarrheal diseases of, to mercury. Philadelphia, New York and Chicago: F. A. Davis Co. 1899.

This volume continues the scheme of the series on the same lines that the editor originally mapped out. The article on diarrheal diseases of infants, with which the work opens, is a most timely and well-prepared exposition of the subject.

The contribution on insanity from the pen of the late Dr. George H. Rohé is of absorbing interest, and will be sought by alienists everywhere as an authoritative description of all forms of mental aberration that are grouped under the general term insanity. Rohé's definitions are clear and concise, his symptomatology is succinct and instructive, his treatment scientific and humane, while all the collateral points are developed in a manner that indicate a complete knowledge of the subject, which is imparted to the reader with a marvelous power that cannot be misinterpreted. His section on general

paresis reads like a story and is told in fascinating language. This was probably Dr. Rohé's last contribution to medicine, and is in every way worthy of the distinguished author.

The other articles in the volume are deserving of careful study. Especially to be mentioned, however, are the following: Malarial fevers, by James C. Wilson and Thomas C. Ahton; locomotor ataxia, by W. B. Pritchard; intubation, by F. E. Waxham; diseases of the liver, by Alexander McPhedran; meningitis, by Charles H. May, and leprosy, by the editor.

This series when complete will constitute one of the most valuable additions to a physician's library in the way of reference works, that has yet been offered to the profession.

TWENTIETH CENTURY PRACTICE. An International Encyclopedia of Modern Medical Science. By leading authorities of Europe and America. Edited by THOMAS L. STEDMAN, M. D., New York City. In twenty volumes. Volume XVIII. Syphilis and Leprosy. New York: William Wood & Co. 1899.

This entire volume is devoted to the consideration of syphilis and leprosy. The contributors are Jonathan Hutchinson, of London; Eduard Lang, of Vienna, and Prince A. Morrow, of New York.

The first 369 pages or a little more than half of the book is allotted to acquired syphilis and is written by Professor Lang. As might be anticipated the pathology of this disease is strongly handled by this author. In the absence of knowledge concerning the germ of syphilis, Lang declines to define the disease, and contents himself with enumerating the effects produced by the contagium, as the only means of characterising the disease. The entire monograph is stamped with masterful knowledge of the subject, and is most fascinatingly written, without verbosity or pedantry. It is, perhaps, all in all, the best contribution to the study of syphilis that has yet been presented to the profession of medicine.

The next section, consisting of twenty-eight pages, takes up the subject of inherited syphilis and is written by Jonathan Hutchinson. It will amply repay all doubters, or those who are without definite opinions as to the transmission of syphilis on the lines of heredity, to carefully study Mr. Hutchinson's exposition of the subject, as set forth in these pages. One of the most important questions in regard to inherited syphilis is the dying out of the taint. How long does it require? How may the fact be recognised? When these questions are answered we shall have made substantial progress in this intricate field.

To the consideration of leprosy, 300 pages of the book are assigned and the article is written by Prince A. Morrow. In it he discourses upon all phases of the disease, throwing much light upon its sources and modes of infection, as well as its treatment. The historical part of the section is most interesting, indeed, it is doubtful

if a more complete dissertation has ever been presented upon the whole aspect of the disease in modern times.

The volume is one of great interest from cover to cover.

A COMPEND OF THE DISEASES OF THE EYE AND REFRACTION. Including treatment and surgery. By GEORGE M. GOULD, A. M., M. D.; formerly Ophthalmologist to the Philadelphia Hospital, etc., and WALTER L. PYLE, A. M., M. D., Assistant Surgeon to Wills' Eye Hospital, Philadelphia, etc. Second edition, revised and enlarged. Duodecimo, 295 pages with 109 illustrations, several of which are in colors. Philadelphia: P. Blakiston's Son & Co. 1899.

Blakiston's compends have been very popular for years and have seemed to serve a useful purpose to students. This one on the eye is especially valuable, and in its second edition, it has been enlarged and improved by the addition of several new subjects. In its present form, it is brief, fairly comprehensive and reliable.

A. A. H.

THE URINE AND THE CLINICAL CHEMISTRY OF THE GASTRIC CONTENTS, THE COMMON POISONS AND MILK. By J. W. HOLLAND, M. D., Professor of Medical Chemistry and Toxicology, Jefferson Medical College of Philadelphia. Sixth edition, revised and enlarged. Duodecimo, forty-one illustrations. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street.

This laboratory guide has been in use in medical colleges for many years. It is in convenient form for laboratory use, one page on each leaf is left blank for notes, and it contains all the usual tests employed in the examination of the urine and the gastric contents, besides tests for the detection of the common poisons. It also includes the analysis of milk. The book is a very well-arranged and useful manual.

INTERNATIONAL CLINIC'S. A Quarterly of Clinical Lectures on Medicine, Neurology, Surgery, Gynecology and Obstetrics, Ophthalmology, Laryngology, Pharmacology, Rhinology, Otology and Dermatology, and Specially Prepared Articles on Treatment and Drugs. By professors and lecturers in the leading medical colleges of the United States, Germany, Austria, France, Great Britain and Canada. Edited by JUDSON DALAND, M. D. (Univ. of Penna.), Philadelphia, Instructor in Clinical Medicine and Lecturer on Physical Diagnosis in the University of Pennsylvania; Assistant Physician to the Hospital of the University of Pennsylvania, etc.; Fellow of the College of Physicians of Philadelphia. Volume III. Ninth series. 1899. Octavo, pp. x.—298. Philadelphia: J. B. Lippincott Co. 1899.

The topics dealt with in this number are: drugs and remedial agents; treatment; medicine; neurology; surgery, gynecology and obstetrics; ophthalmology and dermatology. The prominent authors are: At home, Drs. Charles G. Cumston, A. A. Eshner, Edward Jackson, Joseph M. Mathews, and John C. Munro; abroad, Adolph Baginsky, Professor Dieulafoy, Ernst Küster, Alfred Robin, Friedrich Schultze and Francis Warner. There is a preponderance of prominent foreigners among the contributors to this issue.

Professor Mathews, of Louisville, as is his custom, contributes a practical lecture upon rectal diseases, this time having especial reference to the treatment of fistula. This is a disease that formerly was the special prey of the quack, but, thanks to Prof. Mathews and his colleagues in this department of medicine, it is now almost completely wrested from their greedy clutches. There are many other practical lectures in this book and it will prove a valuable aid to the practitioner of medicine who is deprived of post-graduate privileges.

AMERICAN POCKET MEDICAL DICTIONARY. Edited by W. A. NEWMAN DORLAND. A. M., M. D., Assistant Obstetrician to the Hospital of the University of Pennsylvania, etc. Containing the pronunciation and definition of over 26,000 of the terms used in medicine and the kindred sciences, along with over sixty extensive tables. Second edition, revised. Philadelphia: W. B. Saunders. 1899.

This excellent dictionary is only to be seen to be approved. The first edition was quickly exhausted, hence a new one that has afforded an opportunity for revision, of which the authors have taken advantage. It is bound in flexible red leather, possesses a thumb index, is well printed in clear-faced type, and is offered at the low price of \$1.25. It is one of the best pocket dictionaries extant.

A MANUAL OF MATERIA MEDICA. THERAPEUTICS, MEDICAL PHARMACY, PRESCRIPTION WRITING AND MEDICAL LATIN. For the use of students and practitioners of medicine. By WILLIAM SCHLEIF, Ph G., M. D., Instructor in Pharmacy in the University of Pennsylvania. In one very handsome 12mo volume of 352 pages. Philadelphia and New York: Lea Brothers & Co.

This is the initial volume of a series of "pocket text-books" issuing by the publishers. It is a condensed exposition of the subjects it deals with and when so regarded it meets approbation. It cannot take the place of the standard text-books on materia medica and allied topics, nor is it intended to do so. It, however, does contain sufficient material to fit the needs of the beginner and to serve as a book of quick reference for the practitioner. The book is well printed upon good paper with clear faced type, and is handsomely bound.

The series is edited by Dr. Bern. B. Gallaudet, demonstrator of anatomy and instructor in surgery at the College of Physicians' and Surgeons', New York.

BOOKS RECEIVED.

Musser's Medical Diagnosis. A Practical Treatise on Medical Diagnosis, For the use of students and practitioners. By John H. Musser, M. D., Professor of Clinical Medicine, University of Pennsylvania, Philadelphia. New (third) edition, thoroughly revised. Octavo, 1082 pages, with 253 engravings and 48 full-page colored plates. Just ready. Cloth, \$6.00 net; leather, \$7.00 net.

Progressive Medicine. Volume IV. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, handsomely bound in cloth, 398 pages, fifty-one engravings and five plates. Philadelphia and New York: Lea Brothers & Co.

Refraction and How to Refract. Including Sections on Optics, Retinoscopy, the Fitting of Spectacles and Eye glasses, etc. By James Thorington, A. M., M. D., Adjunct Professor of Ophthalmology in the Philadelphia Polyclinic and College for Graduates in Medicine; Assistant Surgeon at Wills' Eye Hospital; Associate Member of the American Ophthalmological Society; Fellow of the College of Physicians of Philadelphia; Member of the American Medical Association; Ophthalmologist to the Elwyn and the Vineland Training Schools for Feeble-minded Children; Resident Physician and Surgeon, Panama Railroad Co., at Colon (Aspinwall), Isthmus of Panama, 1882-1889, etc. Two hundred illustrations, thirteen of which are colored. Octavo, 301 pages. Cloth, \$1.50 net. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street.

A Manual of Modern Gastric Methods, Chemical, Physical and Therapeutical. By A. Lockhart Gillespie, M. D., F. R. C. P. E., F. R. S., E., Lecturer on Materia Medica and Therapeutics in the School of Medicine of the Royal College, Edinburgh; Post-Graduate Lecturer on Modern Gastric Methods, Edinburgh, etc., etc. With a chapter upon the mechanical methods used in young children, by John Thomson, M. D., F. R. C. P. Ed., Assistant Physician, Royal Hospital for Sick Children, Edinburgh. New York: William Wood & Co. 1899.

Transactions of the American Ophthalmological Society. Thirty-second annual meeting, Pequot House, New London, Conn., July 18, 1899. Vol. VII., Part II. Published by the Society. New Bedford, Mass.: Mercury Publishing Co., Printers. 1899.

Transactions of the American Gynecological Society. Volume XXIV. For the year 1899. Edited by J. Riddle Goffe, M. D., Secretary. Philadelphia: William J. Doran, Printer. 1899.

A Manual of Diseases of the Eye. By Edward Jackson, A. M., M. D., Emeritus Professor of Diseases of the Eye in the Philadelphia Polyclinic; Member of the American Ophthalmological Society, etc., etc. With 178 illustrations and two colored plates. Philadelphia: W. B. Saunders. 1900.

Report of the Commissioner of Education for the Year 1897-98. Volume I. Containing Part I. Washington: Government Printing Office. 1899.

LITERARY NOTES.

THE Antikamnia Chemical Company, of St. Louis, has distributed to its patrons another skeleton calendar, the drawings of which were made by that clever artist, the late Dr. L. Crusius. This calendar for 1900 is, we think, superior in design and effect to its predecessors. The figures are for the most part smaller, and the subjects are better in conception and execution. It will be sent to physicians upon application to the Antikamnia Chemical Co., 1723 Olive Street, St. Louis, Mo.

THE Columbia desk calendar for 1900 has come to hand with its usual promptitude. This is its fifteenth edition and like its predecessors, this calendar is designed to furnish the user with a convenient memorandum pad arranged according to the days of the year; and, incidentally, to supply valuable guidance to all seekers for information on the subject of quality in bicycles. It is needless to add that it fulfils both conditions admirably. It has become well-nigh an indispensable part of the busy man's desk outfit.

ARCHIVES OF NEUROLOGY AND PSYCHOPATHOLOGY.—The Archives of Neurology and Psychopathology, published under the auspices of the New York State Hospitals and the Pathological Institutes commences its second year under the most auspicious circumstances. The opening number is a handsome volume of extreme value and importance and is comparable with the best of medical publications anywhere to be found.

The contents of this number are : On the Nucleoproteids of the brain, by P. A. Levene. Introduction. Some remarks on the chemical nature of the chromatin and their rôle in the function of the cell. Cerebro-nucleoproteid. Methods of preparation. Composition. Cerebronuclein. Cerebronucleic acid. Some remarks in regard to the presence of more than one chromatin in the nerve cell.

Iodine compounds in the tissues after administration of potassium iodide, by P. A. Levene. Introduction. The purpose of the investigation. Methods employed. Results of the analysis of the egg. Results of the analysis of other tissues.

The cranial and first spinal nerves of *Menidia*, by C. J. Herrick. A contribution on the nerve components of the bony fishes.

The article or rather monograph by Dr. Herrick is one of the most important ever made to ichthyology and is accompanied by seven handsome plates.

The editors are to be congratulated upon the great success of their undertaking and the profession should encourage in all manner possible the efforts of the distinguished staff of editors.

MESSRS. M. J. BREITENBACH COMPANY, of 100 Warren Street, New York, have again placed the medical profession under great obligations. The edition of their year-book for the year 1900 has been

sent out to physicians and is now being distributed through the mails. It is a handsome duodecimo volume, bound in flexible red muslin, containing a page for every day in the year. Its frontispiece is a fine portrait of the late Lawson Tait. It is one of the most convenient desk memorandum books that we have seen and has become almost indispensable for an active physician. It will be supplied to those who have, perchance, been overlooked in the first distribution, upon application to the well-known house that publishes it.

MESSRS. BATTLE & CO., of St. Louis, have recently issued a brochure, entitled, Blood dyscrasia, in which the value of ectol as an "anti-purulent" is set forth. The testimony as to the value of the remedy is quite voluminous and would seem to justify further experimentation with it in cases with a tendency to dyscrasia, tissue disintegration and blood poisoning.

COCA and its therapeutic application is the title of an interesting and instructive monograph written by Mr. A. Mariani, of Paris, which is well illustrated. It is based on physiological studies, researches and designs made at Mr. M.'s laboratory at Neuilly on the Seine, where in hot houses he has succeeded in producing large quantities of coca plants, that are now under cultivation. Physicians are invited to visit this establishment and no doubt many will avail themselves of the invitation during the Paris exposition.

Erythroxyton coca is a drug of great therapeutic value, yet it is greatly misunderstood and even misrepresented. The work Mr. Mariani is doing will serve to clear up doubts and place it where it properly belongs, as he is undoubtedly the greatest living expert upon this plant and its products. The book in question may be obtained upon application to Mariani & Co., 52 West 15th St., New York.

ITEM.

MESSRS. WILLIAM R. WARNER & CO., of Philadelphia, have received a silver medal diploma and blue ribbon, from the National Export Exposition, which recently closed its exhibit at Philadelphia. This is the highest award granted at the exposition, and is further evidence that this well-known house continues to manufacture pharmaceuticals of superiority.

BUFFALO MEDICAL JOURNAL.

VOL. XXXIX.—LV. FEBRUARY, 1900.

No. 7.

Original Communications.

THE CLINICAL THERMOMETER AS A GERM CARRIER.¹

By W. L. CONKLIN, M. D., Rochester, N. Y.

IT IS safe to say that no other article of the physician's outfit is used so constantly, and in such a variety of diseases as the clinical thermometer. In exceptional cases, it is true, the information which it furnishes is of little value, but in all contagious diseases, and most others, the service which it renders as an aid to diagnosis and treatment is so evident that its use has come to be a routine practice with us all.

This frequent and promiscuous use of the thermometer furnishes food for thought when we reflect that in a large proportion of cases the temperature is taken in the mouth, which is the abiding place of innumerable germs, and that many of these germs are capable of producing morbid conditions which endanger life itself.

We rightly consider absolutely sterile instruments and dressings and surgically clean hands, as requisites to successful operative work; and to open an abscess for one patient and a vein for the next with a scalpel which had been cleaned, if cleaned at all, by wiping it on a towel, would be inexcusable disregard of a fundamental rule of surgical practice. But are we equally careful to see to it that our thermometers are bacteriologically clean? And if not, *why not*? Assuming that the thermometer, as well as the scalpel, may be a germ carrier, does not the mouth furnish as favorable a medium for the development and growth of bacteria as the open wound?

1. Read at the thirty-second annual meeting of the Medical Association of Central New York, at Syracuse, October 17, 1899.

There is evidently an important difference between the cleaning which destroys germs and renders an object surgically or bacteriologically clean, and the cleaning which is effective only so far as the removal of macroscopic objects is concerned. Is it not the latter process, rather than the former, to which our thermometers are subjected? It has been asserted that the ordinary methods of cleaning a thermometer, such, *e.g.*, as holding it under the water faucet, or wiping it with a damp cloth are sufficient to rid it of bacteria. That such is not the case, however, is conclusively shown, I think, by the chart which I present, together with the reports of bacteriological examinations made for me by Prof. Charles Wright Dodge, of the University of Rochester. The chart is an enlargement of a camera drawing, made by Professor Dodge, and represents, with mathematical exactness, the size of a tubercle bacillus and a Klebs-Löffler bacillus, as compared with the length and width of the shorter degree marks on a thermometer. It also gives us an accurate picture of a scratch and pits found with the microscope in the glass of the thermometer bulb. These are not visible to the naked eye, but the microscope reveals multitudes of them. A glance at the chart will show that they are large enough to harbor microorganisms galore.

You will observe that the degree mark and these scratches and pits are magnified only 1,200 diameters, while the bacilli are magnified 6,000 diameters. If the degree mark were magnified in the same proportion as the bacilli, it would be over thirty feet long and nearly four feet wide. A simple computation, based upon the accurate measurements of the camera drawing, shows that a degree mark is wide enough to accommodate 100 tubercle bacilli, marching in single file, so to speak. Also that an area with the length and breadth of one of these marks would furnish room for the lodgement of 280,000 tubercle bacilli. When we consider that degree marks have depth, which cannot, however, be readily measured, we see that each of them is capable of harboring a much larger number than this. These figures are of practical value, so far as they help us to realise the extreme minuteness of microorganisms as compared with the indentations, visible and invisible, on the surface of our thermometers. It seems evident that ordinary washing and wiping can not be relied on to dislodge bacilli from a surface covered with such indentations.

The chart is offered in evidence, as the lawyers say, by way of proving the possibility of making a germ carrier out of the clinical

BACTERIA AND CLINICAL THERMOMETERS.

Bacillus tuberculosis .6000. *Bacillus diphtheriae* .6000.



Pits in Bulb .1200.

Scratch in Bulb .1200.



Graduation mark .1200.

thermometer. Now for the actual proof that a germ carrier it is, if the ordinary methods are relied on to rid it of bacteria.

Believing that a clinical thermometer should at all times be sterile, I have for some months carried my thermometer in an ordinary rubber case, which is filled with a 1 to 500 or 1 to 250 bichloride solution. All that has been necessary to prevent leakage of the solution is a piece of leather packing, but there is gradual shrinkage in amount as each time the thermometer is withdrawn from the case a small portion of the solution adheres to it and I find it necessary on this account to renew the solution once in three or four days. It is my custom to rinse the thermometer in a glass of water or under the faucet before and after using. While experimenting for the purpose of proving that a thermometer cleaned in the ordinary way is not necessarily sterile, I have at the same time sought for proof that a thermometer kept constantly immersed in a strong bichloride solution, as described above, is entirely free from microorganisms. The results of bacteriological examinations for these two purposes will be given together.

Experiment A.—In May last I took the temperature of a tubercular patient with two thermometers. Both were then washed by pouring water over them and one was returned to an ordinary case, while the other was placed in the case containing 1 to 500 bichloride. Petri dish cultures were made from both thermometers by Professor Dodge. The culture from the thermometer which had not been sterilised developed no tubercle bacilli, but several colonies of other microorganisms were found. No growth whatever could be found from the other culture, proving that the thermometer which had been immersed in bichloride was absolutely sterile.

Experiment B.—On September 4th the temperature was taken in the case of a child convalescing from diphtheria. The thermometer was then rinsed in water, rubbed over the blood serum of a culture tube and the tube taken to the laboratory of the health board. While no diphtheria bacilli were found, throat germs were abundant, some of them showing the characteristics of the staphylococcus pyogens albus. Evidently washing had not rid the thermometer of germs.

Experiment C.—On October 3d, I took the temperature of a case suspected to be one of diphtheria. After removing the thermometer from the mouth, I held it under the faucet, washing it in the usual way, I then rubbed it over the blood serum as in experiment B and returned the culture tube to the laboratory.

Following is the report of Professor Dodge: "Microscopic examination showed presence of many involution forms of diphtheria bacilli, together with a number of other forms of bacteria not identified, but frequently found in throat cultures."

Through the kindness of Dr. Kiefer I have placed a slide from this thermometer culture under the microscope for the inspection of any who may be interested. Those organisms showing irregularity of outline and staining are good specimens of Klebs-Löffler bacilli.

Experiment D.—On October 5th, through the courtesy of the house-physician of St. Mary's Hospital, I took the temperature of a convalescing case of diphtheria, using two thermometers. After taking the temperature, both thermometers were held under the faucet and thoroughly washed. One of them was then rubbed over the blood serum of a culture tube and the tube marked "A." The other was placed in its case, which contained a 1 to 250 bichloride solution. One half hour later this thermometer was removed from its case, held under the faucet again to rinse off any bichloride solution which might adhere to it, and then rubbed over the blood serum of a culture tube, which was marked "B."

On the next day Professor Dodge reported as follows: "Culture tube marked "A" showed no diphtheria bacilli, but an abundant growth of staphylococcus pyogens albus and numerous diplococci. Culture tube, marked "B," furnished absolutely no growth of any kind.

To summarise: Bacteriological examination of six thermometers. Four had been washed but not sterilised. Microorganisms, of one or another variety, were found on each of the four. Two had been washed and then placed in a case containing bichloride solution. No microorganisms were found on either.

If these experiments furnish conclusive proof, and I think they do, that the thermometer may be a germ carrier, if cleaned in the ordinary way; and if they show, further, that by means of a very simple and inexpensive device it may be rendered sterile after each use, may I not, as the conclusion of the whole matter, urge the importance of using, always and only, a thermometer which is bacteriologically clean?

232 SOUTH AVENUE.

DISCUSSION.

Dr. SEARS.—I learned yesterday a circumstance which would lead us to believe that it would not be a bad idea for some of our school teachers to take lessons in bacteriology. I discovered that a teacher

in the primary department is allowing the children to blow soap bubbles from the same pipe indiscriminately. If there is anything worse than that to disseminate disease, I don't know anything in my experience that equals it. And, in fact, not only that, but there were a number of cases of scarlet fever and diphtheria in the school district. I immediately wrote the principal in that district, asking if there was any way of instructing the teachers in bacteriology so that this thing would not occur again. That is one of the most flagrant lacks of knowledge that I think ever came to my notice.

Dr. CLIFFORD MERCER.—I think quite recently—it may still be true—pencils have been passed in the public schools in Syracuse, to be used by the pupils, and they commonly chew the ends. They are gathered up. The next time they are repassed and they go to another child. And this was done repeatedly, day after day. I believe that goes one step further.

Dr. VAN DE WARKER.—That isn't anything. I had occasion to visit officially a truant school. Went into the bath rooms. Tumbler on the shelf. Toothbrush sticking out of it. And I said to the custodian, "whose toothbrush is that?" "He said, it belongs to the boys; we inculcate habits of cleanliness." There were eighteen boys in the truant school at that time.

Dr. CLIFFORD MERCER. —But to the original thought: it has been a source of a great deal of annoyance to my conscience, in every way, to occasionally be present while men have taken temperatures in contagious cases among children, men older than myself sometimes, who make no attempt whatever at washing the thermometer. They use it upon the subject and put it in their case with no cleanliness whatever. What can you say? That is a thousand miles away from this idea of keeping it in a vat; but men do that. They do it every day. I have seen them do it. I couldn't say anything, but if they are here, they may know whom I mean.

Dr. HOWE, Ontario.—It has been my custom for several years, as I presume it has also of many others, to keep quite a number of thermometers. I never use a thermometer continually in my practice. I think that every practitioner ought to have quite a collection of thermometers. I think that the remarks of Dr. Conklin are practical, sensible and timely, and that it would seem to me that we ought to assist in encouraging the profession to follow out just the lines suggested by him. Of course, if we could have this little reservoir, in which our thermometer could be continually carried, which I have not, that would simplify matters and we would get along with far fewer thermometers. But, in my case, I have always made it a practice, as I say, of keeping on hand quite a number of clinical thermometers and I think that too great care cannot be given to them, and I think it is the duty of all of us to listen attentively and to follow the suggestions thrown out by Dr. Conklin, which are so timely and wise.

Dr. CONKLIN.—I want to say that one point is the simplicity of the device which I have. All you have to do is to pour some bichloride into your ordinary hard rubber thermometer case and put a little packing around the cap and you have it, and such a thermometer has been proved, by two careful bacteriological examinations, to be absolutely sterile. I think it is so easy to have a sterile thermometer at all times that we ought never to use one which may be a carrier of disease.

PRESENTATION OF PATIENT SIXTEEN MONTHS AFTER MODIFIED KRASKE'S OPERATION FOR EXTIRPATION OF RECTUM.¹

By S. L. ELSNER, M. D., Rochester, N. Y.

THIS patient, aged 60, a farmer, residing in Honeoye Falls, N. Y., first consulted me in May of last year. His family history is good. For a short time, some eighteen years ago, he suffered from hemorrhoids, otherwise he had always enjoyed good health. About ten months before seeing me he began to have constipation and during evacuations felt a burning pain in rectum. His stools soon contained blood, pus and mucus and were very offensive. When his bowels were not loose there was evidence of a stricture by the form of the stool. Pain steadily grew worse, bleeding more frequent and the discharges more offensive. Great loss of strength and flesh followed. Examination at this time revealed that he was poorly nourished. Weight, 136 lbs; markedly cachectic. His heart, lungs, liver and spleen normal; pulse rapid and temperature slightly elevated. Urine, 1025, loaded with phosphates, but otherwise negative. The rectum showed a carcinoma, beginning at the sphincter and taking in the left half of the rectal wall for about one inch. The second inch and a half of the gut was a complete circle of cancer with a marked stricture at its upper extremity. On asking the patient to make pressure this circular part of the growth came forward and I could feel healthy mucous membrane above it.

He had up to this time been treated for "hemorrhoids," "ulcerated rectum," and had frequently been dilated with the rectal bougie. In fact, one of our advertising quacks, after looking at his tongue and feeling of his pulse, was ready to guarantee a cure with three treatments.

After spending one month more in arranging his business affairs and getting the advice of some reputable surgeons, he returned to

1. Read at the thirty-second annual meeting of the Medical Association of Central New York, at Syracuse, October 17, 1899.

Rochester in June, 1898, prepared to chance a radical operation. Examination at this time showed the growth to have increased, involving now considerable of the anterior wall over the prostate. It was also with difficulty that I could reach above the stricture. He was suffering more pain; there was more obstruction, and it required a great effort for him to urinate. He entered the hospital and during the first four days received thorough preparatory treatment. This consisted of the ingestion of a large amount of fluids and copious and frequent flushings of the colon. Operation, June 25, 1898. A left iliac colostomy was completed, all but the opening in the gut. The patient was then placed in an exaggerated Sims's position. An incision, from the left of the second sacral spine, curving toward the median line and reaching the anus, was made. The soft parts were retracted and thus the lower left half of the sacrum and coccyx were exposed. The left sacro-sciatic ligament was divided. After removing the coccyx, the posterior wall of the diseased gut presented. The posterior attachments of the rectum were now loosened from the anterior surface of the sacrum and the fifth and lower half of the fourth vertebra of that bone excised. The upper extremity of this section ended one third inch below the third sacral foramen.

Thinking that it would be possible to excise well beyond the diseased portion of gut and yet not open the peritoneal cavity, I proceeded to free the rectum. On reaching the lower portion my fingers broke through into the lumen of the gut in several places. At this stage in the operation I could definitely appreciate the extent of the prostatic involvement, and the utter impossibility of saving even the muscles. An artificial anus in the sacral region was most impracticable and so I decided to modify the operation and close up the proximal end of the gut. This also avoided opening the peritoneum. The section of the rectum was made opposite the edge of the cut sacrum and about threefourths of an inch above diseased tissue. After irrigating the parts, the lower wound and growth were temporarily packed with gauze. The gut was closed with two rows of sutures and fastened behind the sacrum. The diseased rectum with the portion of the prostate involved were then rapidly excised. Hemorrhage was insignificant. In the deep parts of the wound a few stay sutures were introduced and tied. The skin was sutured in part, leaving room above and below for a large gauze packing. Anesthesia was chloroform. The time occupied two and a half hours.

The patient reacted well; at the end of twenty-four hours a small opening was made in the colon. There was no distension and his highest temperature was 100° F. The nausea soon ceased and during the second twenty-four hours he was able to retain fluids. On the second day the opening in the colon was enlarged to the extent of the outer wound. A temporary silk ligature was inserted on each side of the intestinal wall. Making traction on these so pulled up the posterior wall of the gut, that it shut off any direct communication between the gut below and above the opening. These strands of silk were fastened to the adjoining skin on either side and insured against anything passing into the blind pouch. On the sixth day the patient was taking solid food, and he had one or two stools daily.

In making this colostomy the three layers of muscle were separated, each in the direction of its fibers, so that now he has considerable control of the passage and his movements are involuntarily only when by chance his bowels are loose.

The wound in the back was packed and irrigated daily. He sat up in bed during the seventeenth day. On the twentieth day he was out of bed. He walked about during the fourth week and left the hospital for his home six weeks after operation. His weight when discharged was 149 pounds; gain, twelve pounds. For the further treatment of the wound, I am indebted to Dr. H. S. Benham, of Honeoye Falls. In February last, eight months after operation, he had gained about forty pounds and stated that he never enjoyed better health.

R. Belin, in speaking of the iliac colostomy in the radical cure of rectal cancer, October, 1899, states that only a single case is recorded where Kraske's operation was immediately performed after a colostomy. This will be another added to the list, and, I believe, the first in which the end of the gut was successfully closed.

This case demonstrates what radical measures, at times, accomplish for apparently hopeless conditions, and further that colostomy should not be a *dernier* resort since it is a valuable therapeutic measure. It antagonises recurrence and prevents infection at the point of excision.

83 ST. PAUL ST.

INCONTINENCE OF URINE.—*Lycopodium* has been used with success for this affection in children. Twenty drops of the tincture should be given three times a day and this may be increased to forty or fifty drops. It is, in some cases, more efficient than belladonna.

SENSORY PHENOMENA IN MEGRIM.

By J. C. CLEMESHIA, M. D., M.R.C.S., ENG.; L.R.C.P., LOND., Buffalo, N. Y.

MEGRIM, the English equivalent of the French migraine, is also known as sickheadache, blindheadache and some other terms and each of these are properly applicable to only one of the various forms that it may assume. Not in all forms of megrim is there disorder of sight or other sensory phenomena. In simple hemicrania we have periodical attacks of headache coming on, the pain being of a one-sided nature and nausea supervening only in severe attacks.

In the very common malady, familiarly known as sickheadache, the pain is localised in the forehead or other part of the head and is followed and relieved by vomiting. Usually the person is afflicted with a headache, coming on during the day, becoming more intense and later accompanied by a sense of nausea. Night commonly ends the attack. Sleep ensues, and the patient wakes next morning feeling as well as usual.

The next form of megrim we shall mention is a variety sometimes known as "blind headache" from the remarkable obscuration of vision which attends it. The disorder of sight may be present without the headache or nausea following. The headache may be on one or both sides and the blindness may occupy one half or the whole visual field.

The following is a description given me by A. B., at the Buffalo Eye and Ear Infirmary :

She is 22 years of age, and has been afflicted several years, at more or less regular intervals, and an attack can be brought on by attendance at a concert or the theatre, looking into store windows, and the like. She notices a cloudiness in front of the eyes beginning in the center of the field and gradually extending to the periphery, when the center becomes again clear. As the cloudiness extends it is bounded by a zigzag line of various colors which also gradually expands taking a horse-shoe outline. Within this zigzag line of colors is the blind area full of movements, as of boiling fluid and within this is the recovered area of vision. After lasting from ten to twenty minutes a severe headache follows, terminating some hours later by vomiting. In the case of another young woman, there was merely the transient cloudiness without the spectral phenomena.

Some patients have a transient hemianopia, as in the case of C. L., who could only see half an object when one of her headaches were coming on. In her case there was no prismatic effects though headache and vomiting followed. In the case of A. H. there was transient hemianopia in the left eye with transient loss of vision in

the right, also numbness of the tongue and side of body, but no vomiting following the headache.

* In more severe forms, though more rarely, other sensory disturbances occur. Tingling sensations, numbness in the face, limbs, tongue and other parts. These sensations are mostly unilateral and may be followed by transient weakness. Ptosis and a transient paralysis of the recti muscles have followed—aphasia may occur, words are forgotten or misplaced. Aphasia is commonly associated with a tingling on the right side. There may be mental depression, fear of impending evil or languor. All these sensory symptoms may be present without disturbance of vision, but more frequently follow the visual disorder in course of half an hour or so.

In speaking of the disorder of sight in megrim, I am reminded of the many patients who have visited the Buffalo Eye and Ear Infirmary on account of these sensory phenomena, having been alarmed with the idea that serious results might follow; also that many general practitioners do not seem to recognise these sensory symptoms as being a part only of a disorder and not due to a disease of the eyes. Whenever disorder of sight is present, it is an initial symptom, the first step in a series of sensory phenomena of which the paroxysm consists. It is a very common feature in severe cases being only secondary to the headache itself.

Dr. Living in his book on Megrim and Sick-headache states that we have the affection of the sight under two characters: (1) partial obliteration of the field of vision; (2) the spectral phenomena. He goes on to say with respect to the partial loss of sight that this may be central or eccentric. Usually, however, the patient first notices that he is unable to see what is directly in the center of the field of vision, or sees that the center is occupied by a bright spot.

There is a difference of opinion as to the degree of luminosity which the blank spot exhibits in various individuals; some call it white, some shaded, and some refer to it as a cloud, a general dimness or mist.

As to the other type, where the loss is other than central, it usually takes the form of loss of one half the field, usually the right or left half, more rarely the upper or lower half. In the same person the defect in the visual field may be sometimes central and at others lateral. This blindness is not stationary but progressive, extending in the central form from the center to the periphery while the sight gradually returns in the parts first affected.

One interesting case was seen some months ago, not so much as

regards the blindness which was central with no spectral phenomena, but to a concomitant nervous affection which periodically troubled her. This patient, a woman of 38, at various times and most usually when lying down, in bed or otherwise, would find herself unable to rise and also unable to speak, still remaining quite conscious and able to discern any one coming into the apartment but could not move, hand, foot or tongue, remaining helpless until the temporary paralysis passed away, which it would do in the course of ten minutes or so. She had been this way for about seven years and could assign no probable cause, hereditary or acquired. This case seems somewhat analogous to a case of Thomsen's disease that I reported in the *BUFFALO MEDICAL JOURNAL* some years ago.

The spectral appearances vary in different people, from a faintly luminous border surrounding the blind area and attracting but little notice to highly defined and sharply pronounced bright colors, which remain vividly impressed upon the mind. Inside this luminous border is a rapid boiling, bubbling or glimmering motion, and sometimes when the appearances are more brilliant they look like showers of sparks. In regard to this spectrum it has never a well-defined outline, but seems to be made up of angles or zigzag lines.

Dr. Fothergill, who wrote many years ago, in a passage on *Remarks on Sick Headache*, says: "It begins with a singular kind of glimmering in the sight. Objects swiftly change their apparent position, surrounded with luminous angles like those of a fortification." It must be noted that the headache may be preceded by the blindness alone or the spectral appearances alone, though the both together is the usual sequence of events.

Ophthalmoscopic appearances do not throw any light upon the nature of these phenomena. Patients have had ophthalmoscopical examinations made in the various stages of the paroxysm, but the result of careful observations are negative.

As to the ocular symptoms the pupil is sometimes altered in size. Some observers state that it is always dilated, others that it is always contracted. The eyeball is said to be contracted in some cases and paralysis of the recti and ptosis sometimes result. The disturbance which causes the affection of sight must occur somewhere above the optic thalamus, as was long ago pointed out by Wollaston.

Many theories have been promulgated. These I shall not mention. In any case it is certain that no anatomical change is present as a cause of the disease.

Lecture.

STERILISATION OF CATHETERS.¹

By BYRON H. DAGGETT, M. D., Buffalo, N. Y.

THE late Dr. William Pepper addressed a session of the International Medical Congress which met in Washington twelve years ago, said: "That medicine had advanced more in the past twenty years than in the previous two thousand."

Its most notable advancement is in the development of bacteriology. The discovery and demonstration, that bacteria or their toxins are the causes of some of the most active and virulent diseases, followed the claim and demonstration made by Pasteur, in 1860 that there was no development of germs in organic infusions sterilised by boiling, and that fermentation and putrefaction depended upon the introduction of living germs into such infusions, and thus he settled forever the question of spontaneous generation.

Microbes are coextensive and coeval with men. Microbes virulent and beneficent exist in multitudinous hosts; are constantly assaulting the citadel of our homes, incessantly active, bearing either weal or woe. They became virulent in debased civilisation, over crowding, filth and unsanitary conditions of the cities of the ancient continent. Microbic diseases are spread by human intercourse and their ravages must be met and subdued by isolation, quarantine, disinfection and sterilisation.

" We have boiled the hydrant water,
We have sterilised the milk,
We have strained the prowling microbe
Through the finest kind of silk;
We have bought and we have borrowed
Every patent health device,
Now, Dr. Wilson tells us,
We have got to boil the ice."

Devaine demonstrated the etiological (causal) relation of germs to specific diseases. Following this demonstration a host of busy workers in bacteriology made numerous important discoveries. The anthrax bacillus was found in the blood of animals suffering from this malady and by experimental inoculations, this germ was shown

1. A lecture delivered before the School of Nurses, Buffalo Hospital of the Sisters of Charity, November 8, 1899.

to be the cause of anthrax. A germ (spirellum) was found in the blood of a patient suffering from relapsing fever. The typhoid bacillus was found by Eberth and Koch in 1888 and in the same year Sternberg demonstrated the presence of a specific germ in croupus pneumonia. In 1882 Koch announced the discovery of the tubercle bacillus, the recognised cause of consumption. Our knowledge of pathogenic bacteria is rapidly growing.

These discoveries demonstrate: (1) That contagious diseases are caused by microbes; (2) that contagious diseases produce microbes, which either as microbes or their products beget diseases peculiar to themselves, in those who are well.

The practice of surgery and obstetrics has been revolutionised by the revelations of bacteriology. If infection be localised and confined to accessible areas, it can be successfully combatted by germicides, but given internally in sufficient potency and quantity to destroy bacteria, they will destroy life itself.

With this introduction to the general subject I pass to the lesson of the day, namely,

STERILISATION OF CATHETERS.

There are several reasons for giving special attention to urinary asepsis and sterilisation of urinary instruments: (1) The urinary tract is lined by a very fragile and delicate membrane, which is easily eroded or broken, opening a point for infection; (2) The urethral canal is the constant habitat of bacteria; (3) the secretion from the kidneys, often bearing bacterial infection ready for the fray, drenches the passage way several times each day; (4) infection may be conveyed into the urethral canal by catheters and other instruments; (5) sterile instruments in the hands of the unskilful may open the way for infection by agents already at hand.

Previous to the introduction of aseptic methods all wounds developed more or less infection and resulting suppuration. During my student days the professors taught that laudable pus was a harbinger of the healing process. We now know that pus is a harbinger of infection and that infection is neither laudable nor commendable. One professor said that pus was dead blastema; another, that it was not blastema dead or alive.

Aseptic surgery was unknown during the Civil War, and all wounds suppurated and many developed gangrene. As a United States Pension Surgeon I saw scores of large, deeply depressed and attached scars caused by gangrenous wounds. How many died

from wound infection no man will ever know. In the recent Spanish War these conditions were obviated by aseptic methods, notwithstanding the heat of a torrid zone, exposure and the presence of the accumulated filth of centuries.

Previous to the introduction of asepticism, catheter cystitis was a frequent complication of gynecological operations; now, under strict aseptic and antiseptic rules it is rare.

As to instruments, the soft or nonmetallic are preferable, for the reason that there is less power or liability to produce injury of the lining membrane. The objection to the soft instrument is, that sterilisation is more difficult than with the metallic catheter. As a rule, the soft instrument should be chosen. The rubber and woven catheters call for a special method of sterilisation by reason of their composition. The best of them will not endure boiling but for a few minutes; and, as a rule, the chemical germicidal agents quickly destroy them. They decay rapidly in moisture, heat, various fumes, oils and all fatty substances. The best catheters are smooth, both on the inner and outer surfaces, and have no crevices or depressions for the lodgement of infection.

The first step is to wash the catheter with soap suds, outer surface with scrubbing, inner surface by forcing the suds through its lumen with a syringe. Then dry it at a temperature of 100° Fahr.

Guyon, of the Neckar Hospital, Paris, uses dry heat at a temperature of 140°C. The instruments must be perfectly dry, must not come in contact with each other, or the bottom of the oven. This process would cook, the usual run of soft catheters. A good quality of gum and rubber catheters may be placed in boiling water, for not more than five minutes; still the best of them, will not last long under this treatment. Sufficient exposure to steam, to sterilise both gum, rubber and woven catheters will destroy them. Alcohol, solutions of carbolic acid, soda and corrosive sublimate will destroy soft catheters.

Wolf divides septic catheterisation into three stages : (1) Sterilisation of the instruments; (2) maintaining sterility when not in use; (3) aseptic introduction. He also alleges that it is difficult to sterilise nonmetallic catheters without injuring the fabric. Formalin, 1 per cent. solution, is effectual and harmless, but painful to the patient. He claims that 1 per cent. aqueous solution of corrosive sublimate, in equal proportion of glycerine, fulfills all the requirements and that this compound will sterilise a catheter after six hours immersion or five minutes boiling.

Mansel Moullin, of London, says that aseptic catheterism is one of the problems of modern surgery. Dr. Moullin's plan is to disinfect the catheter by boiling, and prepare the hands and parts as if for a surgical operation and thoroughly irrigate the urethra. If the catheterisation is done several times each day, it is not necessary to use this technique but once each day. The catheters are boiled every day and placed in glass tubes, closely stopped. As soon as used each catheter is placed in a solution of boracic acid, there remains until the daily boiling takes place. After boiling and drying they are put into a dry case and tightly closed until ready for use again.

Dr. Edward Martin of the University of Pennsylvania, alleges that the medicated soaps are no better than the ordinary green soap. Exposure to mercurial vapor for twenty-four hours was effectual.

Sterilisation by paraform proposed by Janet is effectual, but paraform is very irritating to the urethral mucous membrane, and the instrument must be thoroughly washed before using.

Efforts have been made to incorporate germicides with lubricants of sufficient potency to destroy urethral bacteria, but they have been failures. A good plan for cleansing the urethra is to attach to the tube of a fountain syringe and flush the urethra as the catheter is introduced. This method not only cleanses the urethra, but also distends and renders it less liable to trauma or injury. In Bellevue Hospital, the catheter is thrown immediately after using into boiling water, then washed with hot soap suds and boiled. Dr. Alexander, New York, has ceased the use of urethral sterilisers before catheterisation, but is careful to cleanse the meatus. It seems curious that we get such diverse results from catheterisation—some persons are readily infected, while others appear to be more or less immune to infection.

In the presence of pus and congestion or inflammatory conditions of the urethral tract, there is much greater liability of infection. For this reason special care should be taken to avoid force or traumatism and to apply flushing with antiseptic, detergent fluids. Over distension of the bladder, begets vascular engorgement, so that, catheterisation should be systematically and regularly carried out to lessen this source of infection.

Brower, St. Louis, says, so long as urine is passed with pathologic force, just so long will we be unable to cure chronic inflammatory conditions. If force aggravates pathological processes so it will beget them. It is never necessary, for if the catheter is blocked, it is due to improper application or an improper instrument. Never be hasty. Nature will aid you, unless you thwart her efforts. The

catheter should be of fair size, sufficient to easily fill the urethral lumen, and its presence in the deeper urethra will cause a retroperistalsis, a vermicular action which will draw the instrument bladderward. This phenomena was noted by McNamara, of Dublin, thirty years ago, also by Civiale, who called it "swallowing backward." The pressure of any substance, in the deep or posterior urethra, will incite this movement, and utilise this principle. The bladder may be flushed without a catheter and without force, providing the body be placed flexed, in a semi-dorsal position.

Morris, of London, and other authorities, say that irrigation is harmful in the presence of acute cystitis, which I will grant, if the forced or catheter methods are used. There is another method, forceless and catheterless, which is the treatment par excellence for cystitis and infection. Agents of infection are always present in the urethral tract and we must ever be on guard against their assaults.

The use of the soft catheter has been even a more important advance in avoiding cystitis than sterilisation itself. Metallic catheters, by the traumatism they often produce, open the gates for infection, in spite of all known methods of combating them.

Various appliances have been proposed from time to time for sterilising urethral instruments; by steaming, by fumigating, boiling, and dry heat—each one advocated by its designer. Their use, outside of a hospital, is not practical and it has not been shown that they are more efficient than the ordinary methods by boiling, steaming, sudsing, washing in solutions of the usual germicidal drugs and drying.

The condition of the urine is a matter for consideration, when using catheters. The chemical reaction of the urine is a guide to urinary therapeutics, and the remedies for combating urinary sepsis. The urine should be held slightly acid, its normal condition by phos. soda. The chemical reaction of this fluid, is one of the questions the doctor will often ask before prescribing, and before passing a catheter.

Various remedies are given for the purpose of making the reaction normal and to render or maintain the urine as aseptic as possible: Salol, eucalyptus, oil of wintergreen, or salicylic acid or its salts, benzoate of soda, benzoic acid, and the sodas or potassium or ammoniacal compounds, kava kava, sandal oil, triticum, parira brava, and many others.

The condition of the urethra and of the urine, especially in cases requiring repeated catheterisation, and in wards where many patients

require this service, should be known. The care of catheters should also be double guarded under these circumstances.

Johnson & Johnson, manufacturers of soft catheters, direct that their instruments should never be coiled, and should be kept in packed cases to protect them from dust and dirt. They should not be powdered or greased. After use they should be flushed with hot water, but not soaked. Their lumen should be thoroughly cleaned and then thoroughly dried. Flush with 1 per cent. of formalin to sterilise before and after using, both inside and outside. Wash off this solution with pure water, to prevent irritation of the membrane. Soft catheters should not be immersed for any length of time in any fluid. No soft catheter, as a rule, should be used more than once each day.

There are several forms of microbes inhabiting the urinary passages, and others may be introduced by instrumentation and by the circulation—some are virulent, others are benign. Their names and classification need not concern us—for sterilisation they are all alike. As a rule, use the soft catheter, woven or rubber. The long soft instrument is very useful in catheterisation of the female patients, to avoid dripping, and is especially useful in washing the bladder. If the urine is turbid or there is any indication for washing the bladder, this should be done before the withdrawal of the instrument. For this purpose use sterilised water, chloral, boracic acid, glycerine and ichthyol, or a weak solution of some form of silver. Use mild, non-irritating remedies lest they induce rhythmic action of the bladder in the presence of urinary retention, frequent and painful urination or when employing the catheterless method. It is often good practice to flush out the bladder following catheterisation. Chloral hydrate, 10 to 15 grains to the quart of water 1-10 to 1-12 per cent. I often use a combination of chloral and silver nitrate for cystitis; these remedies are chemically incompatible, but practically useful.

Select your instrument and clean it, then flush the urethra, at least with a pledget of absorbent cotton wipe and clean the urethral orifice. As a routine practice, this is sufficient. My practice is to inject into the urethra, before catheterisation or sounding, a 2 per cent. solution of antipyrin. This drug is analgesic and antiseptic. It first produces a sharp tingling—say to the patient it will last but a moment. Then lubricate the catheter, and pass it into the bladder. If irrigation of the bladder is indicated, place the nozzle of a small funnel into the catheter and pour the antiseptic solution into the funnel. You will not get much into the bladder, but it will be

sufficient. This process is like that of washing out the stomach. In this way you use no force.

The sensitive, inflamed bladder resents the impact of a stream or jet from a syringe. The bladder will resent the presence of any substance, however bland, except in small quantity, until tolerance is established by repeated use. Remove the catheter, and before you lay it down, start it on its road to sterilisation by dipping it into hot water, either medicated or plain. In regard to lubricants, fatty substances are usually recommended, such as vaseline, oil, and various compounds of glycerine and soap. Grease or animal fat and mineral oils are not normal lubricants of mucous surfaces. Mucous secretions do not readily unite or diffuse with grease or oleaginous mixtures; mucilaginous substances, however, possess a natural affinity for mucous secretion and their union forms a smooth and almost frictionless menstruum. This quality of a mucilaginous compound may be demonstrated in the use of a sound or bougie for dilating a stricture, since an instrument one or two sizes larger may be employed with mucilage as a lubricant than when grease is used. Another point in favor of the mucilaginous lubricant is that the instrument is more readily cleaned when mucilage is used. Rinsing in hot water will remove this substance, while to cleanse it of the grease, requires hot soap suds and friction or rubbing. Again grease vitiates the integrity of all elastic and lacquer covered instruments, while mucilage is harmless, if not beneficial. Several formulæ have been proposed for compounding mucilaginous lubricants.

Gouley (*New York Medical Journal*, November 4, 1899,) states that web and rubber catheters are much injured by fats of all kinds, by glycerin and vaselin, and that the best lubricant is soap, deprived of glycerin and free alkali, and mixed with mucilage of *chondrus crispus*. He recommends the following formula :

R—Powdered white castile soap	1 ounce.
Water	3 ounces.
Mucilage of <i>chondrus crispus</i>	3 ounces.
Formalin (40 per cent.)	10 minims.
Thymol	5 grains.
Oil of thyme	5 minims.
Alcohol	15 minims.

Mode of preparation : Heat the soap and water, and stir until a homogeneous slime is formed; then add the mucilage (one ounce of *chondrus crispus* to one pint) of water; when cool pour in the formalin, then the thymol and oil of thyme mixed, with the alcohol,

stir, strain and keep in a covered vessel until all air-bubbles have vanished. The result is an opalescent substance of the consistence of honey, which should be put up at once in two-ounce collapsible tubes and sterilised.

Ruggles proposed the following formula:

R—Gum tragacanth	gr. xlviij (48).
Ac. carbolic (95 per cent.)	m. ii.
Glycerin	℥iii.
Aqua ad	℥iv.

The basis of the "lubi-chondrin" is Iceland moss. Its formula is not given.

The pharmacist of the Buffalo Hospital of the Sisters of Charity constructs a lubricant from chondrus crispus as a base which is very cheap and most excellent. One who has used the properly prepared mucilaginous lubricant will never wish to use grease. Never put instruments or fingers into the jar of lubricant, always pour out sufficient for temporary use into a small plate or ointment jar lest you dirty or infect the source of supply. "A little leaven will leaveneth the whole lump."

Regarding the sterilisation of urethral instruments, metallic instruments are readily sterilised by boiling, steaming and in other ways, which are destructive to elastic catheters and bougies, so that other methods must be used

I will close by giving you my routine method for cleansing urethral instruments. Assuming they are clean when used, after use, and before I lay them down, I dip into boiling or steaming water, then into a jar of odorless naphtha or gasoline, so that they are already well cleaned. After the catheter is placed or dipped into the gasoline, put the finger over its distal end and as you withdraw it, its lumen is partially filled with the gasoline, invert the instrument and this liquid runs out, thus you have reached both out and inside of the catheter. Before putting the instrument away you may repeat this procedure, or apply some other one. When satisfied that it is clean roll it up in naphthalated gauze and over all a wrap of oiled silk.

Odorless gasoline is cleansing and drying as it rapidly evaporates. Instruments will not rust after its use if they are clean, especially if first dipped into hot water. The use of gasoline in this way will prolong the life of gum catheters and bougies. But these instruments must not be left in this fluid any length of time, since it will soften and macerate them. Soft instruments should be rubbed and polished with fine cloth or chamois skin occasionally. Gasoline is very

destructive to insect life. To what extent it acts as a germicide I am unable to state, except from use as detailed above. It is very cheap, convenient and fulfils other indications and as a cleanser if not an ideal steriliser of instruments. I have used it daily for three or four years.

Armed with a bottle of chondrus crispus co., a bottle of odorless gasoline, a solution of antipyrin, some pledgets of antiseptic cotton and an assortment of catheters, wrapped in naphthalated gauze, you are thoroughly well equipped.

Eternal vigilance is the price of asepticism; even at that price you cannot always procure the results for the reason that our methods are not yet perfect.

THE INCINERATION OF GARBAGE AND EXCREMENT AT MILITARY CAMPS.

A REPORT TO THE HEALTH COMMISSIONER OF BUFFALO.

By W. G. BISSELL, M. D., Buffalo, N. Y.

I HAVE the honor to submit the following report pertaining to the incineration of garbage and excrement, carried on under my direction at the State Camp of Military Instruction during the last season.

May 22, 1899, the following circular letter was sent to many of the leading sanitarians of the country :

Dear Sir.—I have been informed by the New York State National Guard authorities, that an opportunity is to be provided in the near future for a series of experiments to be conducted under my direction, pertaining to the practical application of methods of incineration for excrement and garbage, to be used by military forces in field service.

Should you have ideas on this subject, I will be greatly honored if you will acquaint me with same and will endeavor to put in practical operation any beneficial suggestions that may be offered. In the final report on this subject, special credit will be given those persons offering suggestions that prove, in this connection, of value.

Respectfully,

WILLIAM G. BISSELL, M.D.,
Bacteriologist, Department of Health, Buffalo, N. Y.

A large number of replies were received but, with few exceptions, the writers did not confine themselves to the subject matter, but

dwelt more particularly upon the urgent necessity for a competent system for the disposal of excrement by military forces.

A communication from Dr. Albert L. Gihon, Medical Director of the United States Navy (retired), was the single exception where reference was made to the use of the instruments with which I was directed to conduct tests.

Dr. Gihon states that "an instrument I saw in Buffalo a couple of years or more ago seemed to me to possess all the requisites and to be particularly adapted for military field service, being transportable, effective and inexpensive."

Communications from Dr. U. O. B. Wingate, of Milwaukee, and Dr. Benjamin Lee, of Philadelphia, I also submit as being of particular interest.

STATE OF WISCONSIN, STATE BOARD OF HEALTH, }
EXECUTIVE OFFICE, MILWAUKEE, May 27, 1899. }

DR. WM. G. BISSELL, Bacteriologist, Department of Health, Buffalo, N. Y.

Dear Doctor.—I am in receipt of yours of the 23d inst., in which you ask if I have any ideas relative to the matter of the incineration of excrement and garbage, and that you would be grateful if I would acquaint you with the same. In reply, permit me to state that in what experience I have had in this line, I have never yet seen a crematory that was able to consume all the gases generated by this material.

I presume that the process of incineration has been improved upon to that extent that this can be done now, but if so I would like very much to know it. This has been the principal trouble that I have met with in attempting to burn night-soil, or more especially garbage.

There are certain acid gases which it has seemed to me are incumbustible by any degree of heat that I have seen used in the past. I am unable to state to you what these gases are. All I know is that they produce an intolerable stench whenever incineration has been used in my experience in times past. I have not, however, witnessed the operation of more recent apparatus used for this purpose.

I should be highly honored if you can give me any light on this subject of the combustibility of certain gases that are generated by certain degrees of heat from this material. Thanking you in advance for any information you may give me, I remain,

Very truly yours,

U. O. B. WINGATE, Secretary.

COMMONWEALTH OF PENNSYLVANIA, STATE BOARD OF HEALTH, }
EXECUTIVE OFFICE, 1420 CHESTNUT STREET. }

PHILADELPHIA, May 25, 1899.

DR. WM. G. BISSELL, Bacteriologist, Department of Health, Buffalo, N. Y.

Dear Sir.—Replying to your favor of the 23d inst., I would say that recent inquiries have led me to the conclusion that there is not

at present, any apparatus or contrivance for incineration of excrement and garbage which would be of use in field service.

I am glad to know that the New York National Guard authorities are taking up the question, as I feel it to be one of great importance. There would, of course, be no difficulty in constructing a cremation furnace for a permanent camp.

My own view is that if it were necessary to leave off a few cannon from the equipment of a corps and provide instead portable crematories which, I think, could be devised, the gain would be very great. But it seems almost impossible to make purely military authorities understand the importance of preserving the health of the soldier.

Yours very truly,

BENJAMIN LEE, Secretary.

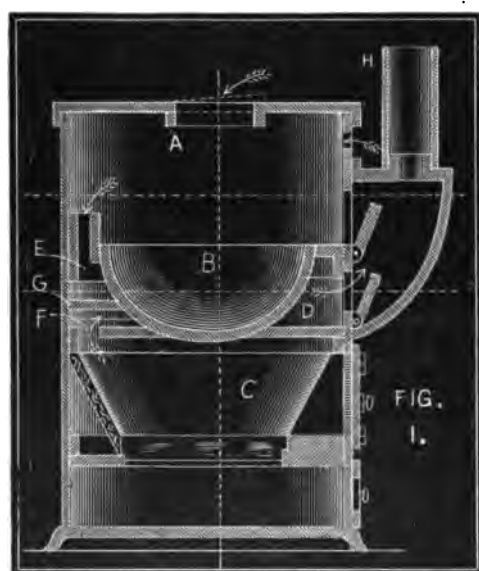
The instruments experimented with by myself were constructed by the International Garbage and Crematory Company of Buffalo, N. Y., (p. 503) and, so far as I am, at this time, able to ascertain, are the only strictly portable incinerators made in the United States, adaptable for military camps and field purposes.

The accompanying cut (p. 502) plainly shows the interior construction, of which "A" is the upper space between the pot or receptacle "B" and the top of the casing; "C" is the fire-box, and "D" is the draft passage; "E" is a passage leading down from the upper space "A" into the draft passage "D" and "F" is an opening leading from the fire-box up into the draft passage "D". A deflecting wall "G" is located midway between the passage "E" and opening "F." The odors from the material in the pot or receptacle are drawn down through the passage "E" by the draft, as indicated by the arrows, and pass through the draft passage "D" into chimney or smoke pipe "H," and the products of combustion from the fire-box "C" pass up through the opening "F" into the same draft passage "D", mingling therein with the odors and gases from the upper space "A", which are destroyed before passing into pipe "H."

For use, the incinerators were placed in a convenient location, and pieces of pipe three feet in height were attached to portions, as shown in diagram at "H." At the time of incineration, the wooden seat supplied with each instrument was replaced by an iron cover. The draft near the smoke-pipe was closed and fire made by using wood as fuel.

June 14, 1899, ten machines accompanied the 2d Battalion of the 23d Regiment on their "march out" from the State Camp to the first camp established by them on land known as the "Croft Farm." This battalion had an aggregate of 268 men present. The incinera-

tors were transported on two ordinary wagons designed for carting purposes, each being drawn by a single team. At the first camp ten incinerators were used. Careful observation as to whether this number supplied the demand for all purposes demonstrated that, at no time, was there occasion for wait. This battalion moved from the first camp on the 15th instant. A detail, under my charge, consisting of three military men and two teamsters completed incineration and loaded five of the instruments in time to catch up with the wagon train. These instruments were ready for transportation in forty-eight minutes after the departure of the troops.

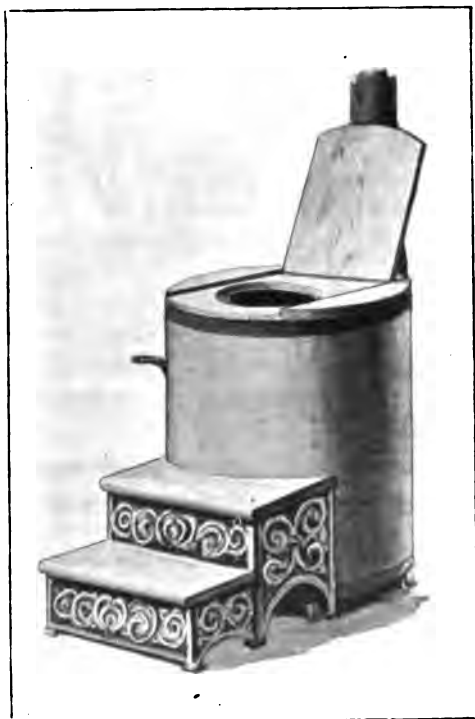


INCINERATOR—SECTIONAL VIEW.

At the second camp (Lake Oscawana) ten machines were used and on the morning of the 16th instant, the excrement contained therein was completely incinerated in about one hour.

June 19, 1899, the first camp on the "Croft Farm" was occupied by the 1st Battalion of the 7th Regiment, and thirteen incinerators were used. This battalion was composed of 430 men, including officers and servants. The troops remained in camp during the day of the 19th until early morning of the 20th inst. On the morning of the 20th inst., incineration was accomplished with all the machines in less than two hours, and ten of the incinerators were transported to

the second camp, the same as that formerly occupied by the 23d Regiment. The number of incinerators used at this camp, including those previously left behind, was fourteen. This number entirely supplied the demand for sink purposes, and on the morning of the 21st instant, after a heavy rainfall, and by the use of wood that had become dampened, incineration was accomplished in about two hours.



INCINERATOR—READY FOR USE.

On the afternoon of the 21st instant, the first camp was occupied by the 2d Battalion of the 7th Regiment, comprising 271 men including officers and servants. Thirteen incinerators were used. On the morning of the 22d instant, incineration was completed in less than two hours.

At the second camp of this battalion incineration with twelve machines was accomplished in one hour and thirty-two minutes. Similar results were accomplished, under varying climatic conditions, including wind and rainfall, with other military organisations.

A thorough test was made as to the disposal of garbage and it was found that garbage in any form could be completely incinerated, the length of time depending upon the nature of the material to be destroyed and the amount of moisture present. As to the practicability of the use of these incinerators for the destruction of excrement and garbage for military purposes and household use, I would state that at no time during incineration, with two exceptions, was there any odor or disagreeable smell given off. In one instance, an incinerator was filled beyond its capacity and, after lighting the fire, the contents boiled over and gained entrance to the fire-box. This happening was the result of carelessness in allowing too many persons to use this individual machine. The other exception occurred at the time when urine was allowed to drop on the top of the incinerator, for, when heated, the urine burns off with the usual odor. Even at such times there was not enough odor to make it decidedly objectionable or obnoxious.

When the incinerators were in use as closets, there was no more odor perceptible than occurs with any ordinary water flushing system. I am informed that for purely military purposes the size of the machine can be materially reduced and the weight of the same made correspondingly less, which factors would materially enhance their value in field operations. For camps of mobilisation and for use in the household where a system of sewerage does not exist, incinerators of the size tested supply every want as a sanitary closet. There is no possible chance of the transmission of disease by their use.

Appended will be found the opinions of the Surgeons of the 1st, 7th and 23d Regiments, together with a copy of the official report submitted to the Department of Education, New York City, by George B. England, inspector.

BOARD OF HEALTH.

JOHN S. WILSON, M. D., Health Officer. }

POUGHKEEPSIE, N. Y., July 8, 1899.

DR. WILLIAM G. BISSELL, Buffalo, N. Y.

Dear Doctor.—While on duty at state camp for instruction, Peekskill, N. Y., June 24, 1899, I critically examined your incinerator and watched it while in operation. The incineration was complete and odorless. I believe you have solved a difficult problem in sanitation. You will find a large field of application for your apparatus.

Faternally,

JOHN S. WILSON, Surgeon, 1st Regiment.

MEDICAL DEPARTMENT SEVENTH REGIMENT, N. G., N. Y. }
 Park Avenue and 66th St. }

NEW YORK, June 30, 1899.

DR WILLIAM G. BISSELL, Buffalo, N. Y.

Sir.—I have the honor to acknowledge the receipt of your letter of June 28th. In response thereto, it gives me much pleasure to state that from my observation of the incinerators used under your direction in the recent camps of the Seventh Regiment at Croft's Farm and Lake Oscawana, I have no hesitation in pronouncing them most satisfactory. Of course, I understand that these particular incinerators were not built for military purposes, nor was easy and rapid transportation greatly considered in their construction, but they certainly do completely and rapidly reduce excrement and garbage to ashes, without odor and thus demonstrate their great value for military camps, both from a labor-saving and sanitary point of view. Could they be considerably reduced in size and weight and be mounted on some sort of low vehicle for quick transportation, their usefulness would be greatly enhanced.

Respectfully,

CHRIS. J. COLLES,
 Assistant Surgeon, 7th Regiment N. G. N. Y.

T E PROSPECT, ON LAKE BOMOSEEN, }
 HORACE B. ELLIS, Manager. }

CASTLETON, VT., July 4, 1899.

DR. W. G. BISSELL, Buffalo, N. Y.

Sir.—Your letter of June 28th, asking for my personal opinion in regard to the incinerators which were tried during the march of the 2d Battalion, has just been received, having been forwarded from Brooklyn. I was very much pleased and surprised at the success of the trial to which the incinerators were put. Only ten were used and no sinks were dug, the number was sufficient for the Battalion. During their use there was no perceptible odor or anything that could be considered in any way objectionable. The incineration of excrement was all done after the Battalion had left camp, so that I did not have an opportunity of seeing that process.

The only suggestion that I have to make is that the incinerator is too bulky and heavy as now made. If made one-half the size and weight, they would be much easier of transportation, and would be large enough for the uses intended.

Respectfully,

HENRY L. COCHRAN,
 Surgeon, 23d Regiment, N. G. N. Y.

MEDICAL DEPARTMENT,
 SEVENTH REGIMENT, N. G., N. Y., PARK AVE. AND 66th ST. }

NEW YORK, June 30, 1899.

TO DR. W. G. BISSELL, Buffalo, N. Y.

Sir.—I have the honor to report that I have observed carefully the incinerators in use at Croft's Farm and Lake Oscawana during

the Camp of the 2d Battalion of the 7th Regiment, N. G. N. Y. I found that the feces previously deposited in these had been entirely consumed, that the fourteen in use were quite sufficient, that by their use the digging of sinks were made entirely unnecessary, that a possible source of danger to the battalion was absolutely removed, and that the hygienic condition of the camps was therefore notably improved. If the incinerator could be made more readily portable and could be mounted on low wheel trucks, suitably covered and screened, the practical use of the apparatus would be furthered.

Respectfully submitted,

JOHN H. HUDDLESTON,

Assistant Surgeon, 7th Regiment, N. G. N. Y.

DEPARTMENT OF EDUCATION,
CITY OF NEW YORK, BOROUGH OF QUEENS. }

June 24, 1899.

Report on a new and improved method for the disposal of excrement and garbage, experiments with which were conducted under the personal supervision of Major Bissell, Surgeon, 74th Regiment, N. G. N. Y.

Major Bissell had consulted either by letter or personally almost every man that could give any information on this very important subject, and after careful study and observation, made the practical test at the State Camp, at Peekskill, N. Y., while the 23d Regiment of Brooklyn was at Camp.

The writer feels in duty bound to make such report, after the kindness of the committee in granting him the privilege to accompany the regiment to camp, and he sincerely hopes the report may contain something of value to the Board of Education in their efforts to solve the problem of sewage disposal, or in other words improve the sanitary conditions of the schools that have the so-called "Smead System" of dry closets. This is a very undesirable subject to converse, but it is nevertheless a very important one, and the Board should be as anxious to obtain the benefit of latest thought, study, experience, and knowledge of practical and scientific men in this line as well as in any other branch of study or training.

Undoubtedly the Board is very well informed regarding the "Smead System," yet, a few words may be necessary for the proper filling of the report. It may be defined as follows: The "Smead System," is a vacuum movement of ventilation of the air in the rooms which is exhausted by an upward current of heated air in a connecting flue or duct. This duct may extend through the vault of the closets, so as to make a direct connection with class-rooms. Of course the current is theoretically from the rooms in question, but like a great many other cases in practice, it does not always work as intended.

Imagine a particular case, which is a fair sample of many schools in the Boroughs of Richmond and Queens. A large vault,

after being in use for a period of several months and containing some cubic yards of excrement, a back draft or current occurs as is often the case. Further comment is unnecessary.

The theory of the "Smead System" is correct, but in practice it is far from being satisfactory because it has not been developed on scientific lines. Any further information may be had from the excellent works of Dr. Billings and Professor Carpenter.

FOR THE DISPOSAL OF EXCREMENT.

The excrement should be received in air and water-tight receptacles. The excrement should be cremated after each individual occupation. There should be no porous material in any part of the apparatus such as brick work, soft wood-work or any complex parts that could not be easily removed and cleaned. The apparatus should be an independent and continuous working arrangement, in no way connected with the system of heating and ventilation. The apparatus should be movable and, of course, have the necessary perfected working parts to ensure the continuous action and rough usage. And the operation so complete that it could be placed in any place without any odor from it. Be so reasonable in price so that every school could procure one, however humble their circumstances. So much for the ideal apparatus. We will now proceed to explain experiments which were conducted at Peekskill on June 14 and 15, 1899.

THE IMPROVED CREMATORS.

There were ten fixtures taken with the 2d Battalion of the 23d Regiment on their "march-out" to Oscawana Lake, some eleven miles distant from camp, over a very rough and hilly country. This was an admirable place for a practical test of the "cremators," and as Major Stokes, who lead the battalion jokingly said, "Why they won't allow them to smell," showing that the learned men had great confidence in their apparatus.

They look not unlike large cylinder stoves, with smoke pipes extending out of the back and with closet seats. The receptacle was a heavy iron pot which held all of the excrement and urine. Ten were found to be sufficient for over 400 men. The pot was directly over and in communication with the firing chamber. After being in use for a day, the fire was started and the contents dried and rendered combustible, after which the pot was dumped directly into the fire and the remaining matter entirely reduced and rendered harmless. In one hour the cremators had been burned out, sterilised, deodorised, cooled and packed for shipment. This goes to show that such an arrangement as described is practicable. This is a subject that should receive the attention of all thoughtful and public-spirited men.

GEORGE B. ENGLAND,
Inspector.

Society Proceedings.

MEDICAL SOCIETY OF THE COUNTY OF ERIE.

Seventy-ninth Annual Meeting, held January 9, 1900.

REPORTED BY F. C. GRAM, M. D., Secretary.

THE Medical Society of the County of Erie held its seventy-ninth annual meeting in the parlors of the Young Men's Christian Association, Mohawk and Pearl Streets, Buffalo, Tuesday, January 9, 1900.

The president, Dr. J. B. COAKLEY called the assembly to order at 9.30 a.m., whereupon the minutes of the semi-annual meeting, and of the memorial meeting, held on the death of Dr. W. C. Earl, were read and approved.

Dr. W. W. POTTER, chairman of the committee on membership, presented the names of the following applicants and recommended their admission into the society: Drs. Felix Hintz, Catherine E. Kelly, Daniel P. Doyle, William J. Deane, James W. Nash and Ernest W. Ewell. The report was received and on motion the applicants were elected to membership.

Applications for membership were received from the following: Drs. Chauncey P. Smith and William R. Little.

Dr. W. W. POTTER offered amendments to the by-laws relative to the admission of members by striking out the words "who shall present it at a regular meeting to the society," after the words "shall make his application to the secretary," in Section 1, Article VII., making the revised section read:

Section 1. Every physician or surgeon residing in the County of Erie, who may hereafter wish to become a member of this society, shall make his application to the secretary. It shall be referred to the committee on membership, which shall report the result of its investigation, accompanied by a recommendation for or against the applicant, at the next regular meeting of the society. The applicant shall be admitted upon a majority vote of the members present.

Also by striking out the words "but shall not be acted upon until the next regular meeting," after the words "shall be presented at a regular meeting," in Sec. 5, Article VII., making it read:

Section 5. Applications for admission to the society shall be accompanied by the initiation fee of \$2.00, and shall be presented at a regular meeting. The application shall be signed by the applicant and shall be made in the following form.

Dr. Potter explained that the by-laws were originally framed as at present to afford ample time for investigation of the applicant's qualifications, but under the new state law this is rendered unnecessary, as he is able to establish his identity and exhibit his credentials at once, or not at all. The proposed amendments were laid over under the rules until the next regular meeting.

The president appointed Drs. Wm. C. Krauss, E. Wende and F. E. Fronczak a committee to nominate officers for the ensuing year :

The committee presented the following nominations : For president, Dr. E. H. Ballou, of Gardenville; for vice-president, Dr. Wm. C. Phelps; for secretary, Dr. Franklin C. Gram; for treasurer, Dr. Edward Clark; for librarian, Dr. W. C. Callanan; for board of censors, Drs. J. B. Coakley, chairman, H. R. Hopkins, I. W. Potter, T. F. Dwyer and F. E. Fronczak; for committee on membership, Drs. W. W. Potter, chairman, G. W. McPherson and J. J. Walsh.

On motion the secretary was directed to cast the ballot of the society for the nominees. This being done they were declared unanimously elected.

All the delegates to the state society were requested to attend the annual meeting at Albany, January 30, 31, and February 1, 1900. and qualify for permanent membership.

On motion of Dr. J. H. GRANT the secretary was authorised to publish a new edition of the by-laws of the society, with a revised list of membership, and mail a copy to each member.

The following report from the Board of Censors was read :

TO THE MEDICAL SOCIETY OF THE COUNTY OF ERIE :

Your board of censors respectfully reports that since its last report made to the society at its semi-annual meeting held on June 13, 1899, it has, with the aid of our counsel, Hon. Tracy C. Becker, investigated and prosecuted the following cases of persons unlawfully practising medicine or surgery in this county.

In the case of Stephen T. Lee, who, at the date of our last report, had been arrested and brought before the Police Court on the charge of administering for hire treatment and medicine to many persons afflicted with cancer and other diseases, the said Lee not being licensed to practise medicine and surgery, he was duly held to answer before the Grand Jury, and was thereafter indicted; and on the 29th day of June, 1899, he was convicted in the County Court of Erie County and fined \$100; which sum, upon order of the court, and pursuant to the statute, was paid by the county treasurer to the treasurer of this society. As Lee promised to abstain from further illegal practice, this board has refrained from instituting any civil suits against him for penalties; but it has him under constant surveil-

lance and will institute proceedings against him in case he shall be guilty of any further infraction of the law.

Ferdinand Szymanski was indicted upon the complaint of this board for practising medicine without a license, and on December 7, 1899, was convicted by the verdict of a jury at the criminal trial term of the Supreme Court. The court believing his statement that he was ignorant of the provisions of our laws, and that he thought he could lawfully prescribe for cases if he did so without charging therefor a fee, suspended sentence on him. This man is still under the surveillance of your board and its agents and will be further prosecuted or brought up for sentence on his conviction if he should again attempt to practice medicine.

In the case of the so-called christian science healer, George H. Kinter, and James C. Saunders, mentioned in our last report, these persons were held to answer at the September term of the United States District Court for the crime of manslaughter, in having negligently caused the death of Rolf Saunders, the minor child of the said James C. Saunders, at the United States Fort Porter, in this city. The counsel for this society assisted and advised with Assistant United States District Attorneys Brown and Dudley concerning the case. Practically the same evidence as was given before the United States Commissioner was presented to the Grand Jury. Diligent effort has been made to procure other evidence which should tend to show clearly that the Saunders child exhibited symptoms and appearances of the disease of which he died, viz. : double pneumonia, so manifestly as to make it criminal negligence for the child's father and healer Kinter to fail to call in a licensed physician who could properly diagnose and treat the case. This evidence could not be procured, chiefly because all the persons who had an opportunity to observe the child during its illness, to-wit: the father and mother of the child and healer Kinter, and his wife having been arrested by order of former United States District Attorney Close and charged with this crime, could not be compelled to give testimony in the case. Moreover, Acting District Attorney Brown and United States District Judge Coxe entertained doubts as to whether the provisions of the United States statutes defining the crime of manslaughter were broad enough to embrace a case of death due to mere acts of negligent omission of duty such as were alleged to exist in this case. After careful consideration of these difficulties and full consultation between the United States authorities, our counsel and Judge Coxe, it was reluctantly deemed best that the United States Grand Jury should be advised not to find a bill of indictment against Saunders and Kinter, because it was believed that if a bill had been found no conviction could have been obtained.

In the matter of the amendment to the ordinances of the City of Buffalo, proposed by Health Commissioner Wende, so to require in definite terms, that all other persons, as well as physicians, in charge or in attendance upon cases of contagious or infectious disease should report the same to the Board of Health, your Board, its counsel and

many members of the society attended upon and presented arguments before the Board of Aldermen and the Board of Councilmen and their committees on many occasions. The amendment to the ordinance as originally drafted included by specific mention christian science healers as well as midwives and nurses. The whole body of christian scientists in this city at first violently opposed, personally and by able counsel, any amendments to the ordinance whatever, but later, having been driven from this position, they shifted their opposition to the claim that they should not be specifically mentioned and should not be put in the same category with nurses and midwives. This amendment, however, changed so as to omit the specific mention of any particular class of persons, but so as to include everyone who might be in charge of or in attendance upon persons afflicted with contagious or infectious diseases, was finally adopted by both branches of the Common Council, was approved by his honor, the Mayor, and became a local law.

This Board has also investigated a number of cases of violation of medical ethics by physicians who advertise, etc., and has remonstrated with them; and in several cases our remonstrances have been heeded and such practises discontinued. It has also warned one graduate in medicine that he had neglected to register in the County Clerk's office as a physician, and he has complied with the law in this respect. It has now under investigation and consideration a very flagrant and long standing case of practising medicine under an assumed name and of advertising in the newspapers and sending circulars through the mails for fraudulent purposes. Our counsel is in communication with the State Board of Medical Examiners and the State Board of Regents and has consulted with other public authorities in reference to this case. He expects soon to be able to institute a vigorous prosecution of the offender, not only to have his license as a physician revoked but also to have him indicted and punished for using the mails for fraudulent purposes, an offense of which the person in question has once before been convicted and fined in the United States Court.

In conclusion this board respectfully recommends that the same compensation per annum now allowed our counsel, Hon. Tracy C. Becker, be paid to him on the order of the board. We also recommend that this board be given authority to employ such detectives and other agents as may be required for the performance of its duties, and to draw upon the treasurer, as heretofore for their reasonable compensation.

Respectfully submitted,
J. B. COAKLEY, Chairman.
FRANCIS E. FRONCZAK.
IRVING W. POTTER.

Buffalo, N. Y., January 9, 1900.

On motion of Dr. CALLANAN the report was received and the recommendations therein adopted.

The treasurer, Dr. EDWARD CLARK, submitted his annual report as follows:

Cash on hand, January 1, 1899	\$159.00	
Collected during year	347.00	
Fine of S. T. Lee	100.00	
		\$606.00
Disbursements as per itemised account	\$460.37	
Balance on hand, Dec. 31, 1899	145.63	
		\$606.00

Referred to Drs. Irving W. Potter and Wyckoff for audit, who later reported that they had found the vouchers and accounts correct.

Treasurer CLARK reported that four of the suspended members, Drs. Bartow, Wheeler, Watkins and Baker, had paid up their arrears, and on motion of Drs. Callanan and Potter they were reinstated. A question concerning Dr. Baker was referred to the Board of Censors.

The librarian, Dr. CALLANAN, submitted a very gratifying annual report. He stated that for the past five years the books have been located in the University of Buffalo and are cared for by the librarian of the University. His request to members for donations of books, especially such as will be valuable for future reference, met with a number of responses, the most generous and valuable coming from Dr. Thomas M. Johnson, who donated 112 volumes, among which were a number giving some of the earlier and later history of medicine in this state through transactions of medical societies.

A vote of thanks was tendered Dr. Johnson for his valuable gift.

Dr. C. E. CONGDON called attention to the antivivisection movement.

Dr. W. W. POTTER stated that the president of the American Medical Association had addressed a circular letter on this subject to all medical bodies and moved that this question be referred with power to the legislative committee of this society. The motion was adopted.

Dr. H. R. HOPKINS offered the following resolution:

Resolved, That the Medical Society of the County of Erie approves of the project of state care in state sanatoria of the poor and others suffering with early and therefore curable consumption; and that we bespeak for this project the confidence and active support of the medical society of the State of New York, and of our representatives, legislative and executive, at Albany, to the end that suitable legislation at the earliest practicable moment may test our beliefs

and expectations for the betterment of an afflicted, neglected and dangerous class of our people.

Resolved, That this resolution, duly attested by our president and secretary, and the seal of this society, be transmitted to the society and persons above mentioned.

The resolutions were adopted and referred to the legislative committee with power to further the spirit of the same at Albany whenever the subject shall come up for action before the legislature.

Dr. BENTLEY S. BOURNE, of Hamburg, offered the following memorial, which was adopted:

WHEREAS, In the death of Dr. W. E. Robbins the Medical Society of the County of Erie is again called upon to record the name of a member deceased, taken in the prime of a life giving bright promise of long years of coming usefulness. He was stricken suddenly; and while in active duty the summons came.

God's finger touched him and he slept.

Resolved, That we bow in reverent submission to the divine mandate of Him who doeth all things well.

Resolved, That in his death this society has lost a valuable member, that we deplore his untimely removal from us and will ever cherish his memory with respect.

Resolved, That the sympathy of this society be extended to his widow and daughters, with a copy of these resolutions.

Resolved, That these resolutions be entered on the minutes of this society and given to the BUFFALO MEDICAL JOURNAL for publication.

The vice-president, Dr. BALLOU, was called to the chair, whereupon, Dr. Coakley read the president's annual address on Water supply and sewerage system of Buffalo, which will be published in the JOURNAL for March.

Dr. COAKLEY stated that invitations had been sent to our city officials, as well as to the health and executive officers of Tonawanda, Niagara Falls and Lockport, and invited those present to participate in the discussion.

Dr. BENEDICT stated that our water supply was purer than that of most cities, and he would not charge all typhoid to the water, but much to local infection. He believed that Buffalo ought to extend its mains and sell water to adjacent towns.

Commissioner of Public Works, Adam Boeckel, said he became a member of the board of aldermen in 1892, and always took an active interest in all that pertained to public health.

The phenomenal growth of American cities necessitated constant improvement of many things which were begun in a very primitive way. He believed in the scientific disposal of sewage and hoped that the Medical Society of the County of Erie and similar societies, would continue to agitate this question until not only local or state, but national laws are enacted compelling every city to take care of its sewage, without polluting streams or bodies of water and endangering the lives of neighboring towns. He declared himself ready at all times officially and personally to aid in any well directed movement toward improving our system of water supply and especially to prevent its pollution.

Commissioner of Public Works, M. J. Healy, chairman of the board, considered a general discussion of a subject like this of the greatest value. Scientific bodies should be active and aggressive. It may not be practical politics, but when the public understands that it means the saving of human lives, it will give a hearty approval. While our water system is one of the best in the country, the board of public works has seriously considered many improvements which become more important as we investigate. He pointed out what improvements were intended in the water supply and sewerage systems, and said the board recognises the rights and duties of the medical profession in this matter, and would at all times be glad to consult with and receive the advice and coöperation of its members.

Chief Engineer Knapp, of the water department, explained on a map the source of the city's present water supply and how it would be possible to obtain a still purer supply at a moderate cost.

City Engineer Bardol explained the sewer system of Buffalo, on a map.

Dr. W. A. SCOTT, health officer of Niagara Falls, said the subject was of vital interest to his city, as the Buffalo sewage finds its way to its doors. All sewage should be so disposed of as not to contaminate the water supply of municipalities. He presented a list of 1,117 cases of infectious diseases occurring in Niagara Falls during the past five years, of which 906 were typhoid fever, and probably one-third actual cases of typhoid had not even been reported. The source of this disease was unquestionably a polluted water supply, caused by the sewage of Buffalo.

Health Commissioner ERNEST WENDE, of Buffalo, stated that since no more water had been taken through the Bird Island inlet the typhoid fever rate had been reduced one-half. He briefly explained

how this was brought about and said that the bacteriological department, which had been so unmercifully criticised and even ridiculed, was the means of saving hundreds of lives annually.

Drs. S. S. Greene, H. R. Hopkins, W. W. Potter, S. W. Wetmore and city bacteriologist Bissell briefly discussed the subject.

Papers were read on The diagnosis of tumors of the breast; its importance, by Dr. Chauncey P. Smith; Neuroses of childhood, by Dr. Maud J. Frye; Unusual condition of the skin and kidneys, following an operation for appendicitis, by Dr. W. G. Taylor. These papers will be printed in a future issue of the JOURNAL.

A vote of thanks was tendered the retiring officers and all the essayists; also to the Young Men's Christian Association for the free use of its parlors.

On motion the usual honorarium of \$50 each was voted to the secretary and treasurer for services during the past year.

The chair appointed the following committee on legislation: Drs. Ernest Wende, Edward Clark and W. W. Potter.

The president elect, Dr. E. H. Ballou, assumed the chair and at 1.10 p. m. the society adjourned..

BUFFALO ACADEMY OF MEDICINE.

REPORTED BY ALBERT J. COLTON, M. D., Secretary.

Section on Obstetrics, Tuesday Evening, October 24, 1899.

A REGULAR meeting of the Obstetrical Section was held October 24, 1899, at the Academy parlors.

The president, Dr. INGRAHAM, in the chair, called the meeting to order at 8.45 p. m. The minutes of the previous meeting were read and approved.

Dr. HAYD before reading his paper reported two cases with specimens of extrauterine pregnancy. Each case presenting all the symptoms usually present in a pyosalpinx. The interesting point in each case, he said was that it presented no symptoms of a ruptured tube or shock, which usually occurs in those cases. The doctor said that he had more than twenty cases and in only a very small percentage of them was he able to get history of ruptured tube; therefore it behooved one not to lay too much importance on those symptoms as indicating ectopic pregnancy. The doctor then read a very interesting and instructive paper on pus in the pelvic cavity¹.

1. See BUFFALO MEDICAL JOURNAL, December, 1899.

The paper was afterward discussed by Drs. Crockett, E. A. Smith, Lyon, Blaauw, Van Peyma, Hartwig, Breuer and Ingraham.

Dr. CROCKETT said that he had not much to add, but asserted that pus in the pelvic cavity could not be diagnosticated, but only guessed at. He said furthermore that in the majority of the cases the pus found in the pelvic cavity was not virulent. No germs of any kind were found in the largest percentage of the cases. He said it made not much difference which route was chosen, the vaginal or abdominal, if no germs were present. He said that the diagnosing of the virulence of the pus was of great importance and recommended the withdrawing of pus with a hypodermic needle as a means of diagnosing its virulence. Also cited a case where pus was virulent in a case operated on and patient died within twenty-four hours of septic peritonitis. The operator should select the route in which he had the greatest skill and experience.

Dr. SMITH in his discussion said that Dr. Hayd spoke with such earnestness that he must have given the subject considerable thought. The doctor said he did not see why the appendix should be omitted from the discussion of pus in the pelvic cavity from a general surgeon's point of view, although he did not care to discuss it as a gynecologist. As to the route of the operation, he would use the one that would do the least harm to his patient. He also spoke of the various means of drainage. He did not like gauze on account of its adherence to granulating surfaces and glass on account of danger of breakage, but recommended aluminum. Did not recommend breaking up adhesions unless bands interfered with the function of the bowels.

Dr. INGRAHAM asked Dr. Smith if he had any experience with hard rubber drainage tubes. The doctor had not, but intended to try them.

Dr. LYON said that marked leucocytosis indicates that inflammation exists. Also said that ascertaining the fibrin formation, which could be made at the bedside, aids in the diagnosis.

Dr. VAN PEYMA said that he had operated on a few cases where there was pus in the pelvis. He also made the statement that had before been made that Ehrlich said that leucocytosis was no indication of pus.

Dr. HARTWIG thought the future would bring about some method of suturing the tube to the vagina for drainage, so that the tubes and ovaries might be saved. As to the route of operation the cases were

to be selected in accordance with its accessibility. When feasible access by the vagina should be preferred.

Dr. BREUER reported a case of multiple abscess of the pelvis where the operator was in doubt as to the route to be taken. Abscess was opened per vaginam and three days later by the abdomen. The patient died. Dr. Ingraham said in his discussion that the paper had been so exhaustive that very little was left to be said. He had operated both ways and in some cases where he had operated one way he wished that he had operated the other and vice versa. He thought that the removal of pus with hypodermic needle for diagnosis was not without danger.

In summing up Dr. Hayd thanked the members for their kind attention and the interest they had taken in the discussion. He agreed with Dr. Crockett that pus in the pelvic cavity was not ordinarily virulent. He denounced drainage. His first lessons he said were from Joseph Price, and for that reason drained his first cases and they died. With only a well-equipped laboratory, such as Kelly's, of Johns' Hopkins, can we expect to do scientific work. The doctor said that Balde in his last eighty cases had drained twice. He read from a medical journal what Morris does in appendicitis cases. Dr. Smith objected as it would require further discussion. The chair thought differently.

There were twenty-seven members present. Meeting adjourned at 10.30 p. m.

Section on Surgery, Tuesday, November 7, 1899.

REPORTED BY MARSHALL CLINTON, M. D., Secretary.

MEETING called to order by the chairman, Dr. J. HENRY DOWD. Minutes of the previous meeting were read, and, on motion, the discussion of the papers for that evening incorporated in them.

RETROPHARYNGEAL TUMOR.

Dr. MYNTER under the head of "report of cases," presented the following: "I have here the case of a large retropharyngeal tumor, pronounced by Dr. Carpenter as a spindle-celled sarcoma. The patient has had this growth in the naso-pharynx for about a year and a half and presented himself for operation about three weeks ago. As we know, these cases if allowed to progress uninterrupted by surgical procedures push their way by extension or pressure necrosis into the nose, accessory sinuses, through the cheek, or into the

mouth through the palate. The methods of attacking these cases are: The intranasal route, through the cheek, after resection of the superior maxilla or as, in this case, by the way of the mouth through the soft and then hard palate. The patient being placed in the Trendelenburg position, after a preliminary tracheotomy, the uvula and soft palate were split in the median line and the soft parts reflected to either side. I think the transoral route offers the best avenue to attack anything in this region, as the hemorrhage from cases of this kind has been enormous so far as reported, and this route offers the best means of controlling the hemorrhage. By resecting the bony palate the tumor was exposed. It was found to be as large as a good sized hen's egg attached to the under side of the sphenoid bone by a narrow pedicle. The smallness of the pedicle throws doubt on the diagnosis of spindle-celled sarcoma. After removal of the tumor a staphylorrhaphy was made on the soft parts and the patient placed in bed. I show here an instrument devised some years ago by myself for the purpose of readily placing the stitches properly in this operation. The advantages in this operation are, first, absence of all external scars; second, the ease with which the hemorrhage is controlled; and, third, the field of operation being in easy sight the entire time. This man, as you can see, has made a perfect recovery.

The committee to report on the advisability of holding meetings at the different hospitals was discharged on motion, as there was no further work for them to do and no report from the committee had been received.

ETIOLOGY AND PATHOLOGY OF APPENDICITIS.

Dr. MYNTER presented a paper on The etiology and pathology of appendicitis and their bearings on its treatment.

Before reading the paper Dr. Mynter related the conditions under which this subject was presented by him at Copenhagen. He said that today, in Denmark, the operation for appendicitis is held to be too dangerous for usual procedure, and is reserved until a hopeless case has gone too long for any benefit, and then the case is operated as a last resort. Being challenged by the medical profession to go to Denmark and defend his title paper, Dr. Mynter presented this subject on the 19th of September, 1899, before a special meeting of the Royal Society of Copenhagen. Denmark is the only country in which appendicitis is held to be a purely medical disease, and treated by drugs, viz.: opium, etc., an operation being rarely performed.

Under the head of etiology was pointed out the anatomical position, structure, and previous attacks; for all severe cases leave

changes behind predisposing to fresh attacks, unless the appendix becomes destroyed by gangrene, complicated with a localised abscess, or obliterated by the destruction of the epithelium and growing together of the newly formed tissue. This later eventuality does not, however, always constitute a recovery, as it may be followed by severe gastrointestinal symptoms in the line of nervous dyspepsia, which may keep the patient in a state of chronic invalidism. Coproliths, their origin, and actions were described. The colon bacillus and the results of their varying growth and virulence in the retained secretions and congested areas was mentioned. While the author believes that at one time every case is of infectious origin, he, on the other hand, maintains that relapses may be traumatic or mechanical in their origin, and perforations and gangrene set in from pressure—necrosis from coproliths without help from the colon bacillus.

The pathology was made the basis for the classification and was given under three heads—catarrhal, infectious and ulcerative—each of which has its own peculiar symptoms, and every case may be put under one of these heads; each having its own etiology, peritoneal lesion, symptoms and prognosis. The corner stone in the pathology of appendicitis is the formation of a stricture after an appendix has been once attacked. Understanding the pathology underlying the formation of any stricture and the subsequent pathological changes which take place at the seat of the stricture, it may be very readily seen how absolutely impossible it is for any drug given by the mouth to be able to reach the sight of an inflammation in an appendix and, therefore, how impossible for medication to have an effect upon it.

A drug cannot have any local action on such a condition. Therefore, the author maintained, that appendicitis is purely a surgical disease and in no respect can be considered a medical one. He compared results from numerous statistics, of the difference in treatment by medical and surgical procedures. He demonstrated that while 80 per cent. of all cases got well despite medical aid, they would have recovered simply by rest and quiet in bed. Of the remaining 20 per cent. all died under medical treatment. With their 80 per cent. the medical men delude themselves that they are able to treat this condition safely; while if the remaining 20 percentage were only handed over to the surgeons in time, the per cent of recoveries would depend absolutely on the time of the operation, the third day being the critical day in these serious cases, as 50 per cent. of these cases died if the operation was delayed beyond this time. If operated upon on or after the fourth day, almost everyone of these

cases died. These cases it is understood are all ones of perforation and general septic peritonitis. If these are operated before the second day has passed from the beginning of the attack scarcely any of them die. The doctor lastly presented statistics that showed 187 cases operated by him during the last few years. Seventy-one of these had been operated since January 1, 1898, and only one had died.

DISCUSSION.

Dr. M. D. MANN said, I have studied Dr. Mynter's book on appendicitis and agree heartily with him in his remarks. The results are highly satisfactory in this disease when it is taken in time. The difficulty which presents itself is when to operate and when to wait. "When in doubt operate" is a good rule to follow. The value of one's judgment depends on the amount of work in this disease he has seen, but we can say as a general rule if any doubt lies in the mind of any one attending a case of appendicitis as to the recovery and favorable progress, cut in at once. When I say at once, I mean at once within the hour. I was called to see a woman with symptoms of a severe appendicitis and in my judgment it was necessary to operate. Within an hour from the time I saw the case I had her open and found a gangrenous appendix and a perforation in her colon. She recovered, but you can see how a few hours delay would have meant her death.

The analogy between the appendix and the Fallopian tube is very striking, when you consider their similar structure and their liability to pathological changes. There is, however, not the same tendency to gangrene and perforation or spreading inflammation in the tube that we find in the appendix. This is true of all pelvic troubles. In looking over the literature of this subject and the amount of work done on it by American surgeons, we find this country far ahead of any European country in the proper handling of this too common disease. Our statistics bear out the assertion that we are able, and do save, a much higher percentage of all cases than in any other country in the world.

Dr. BENEDICT said, I believe the surgeons are becoming more conservative in their views of the treatment of appendicitis than they were a few years ago, and that they do not, as formerly, advise immediate operation in all cases as soon as they see them. The previous rule of "operate all cases as soon as you see them" has been supplanted by a more conservative view of this disease and they are more willing to consider the views of the medical man and watch

a case before cutting in. Cases of appendicitis, as seen clinically, are usually associated with a typhlitis or perityphlitis, as these conditions go frequently hand in hand. Recurrence is not inevitable as cases recover who never have subsequent attacks. In virulent cases associated with chronic constipation, I think the virulency is due to the action of the colon bacillus and that they are the initial cause of the lesions.

The term used this evening of nervous dyspepsia is distinctly a misnomer, as there is no such thing. A man has nervousness and dyspepsia, but not nervous dyspepsia. From the medical standpoint the question arises, Is this a septic or nonseptic case? If it be a nonseptic case or a catarrhal case do not operate, as it will recover by the aid of medication, but if on the other hand it is a septic case, it should be turned over to the surgeon for immediate operation. I consider the use of opium in these cases as both foolish and dangerous. Cathartics have a limited usefulness in some of these cases and may be used to advantage in selected cases. If we have a case of mild severity, no leucocytosis, no shock, and slight symptoms, do not operate but use an oil—a mineral one preferably and administer bismuth and salol; menthol in chronic cases may be used to advantage. The liability to typhlitis may be found in the anatomical structure of the parts, as the contents of the ileum pour into the cecum, which acts in the nature of a stand pipe. After a portion of the fluid contents are absorbed, the residue is syphoned off to the transverse colon. I ask Dr. Mynter, Is there a time not to operate?

Dr. HENDERSON called attention to the apparent geographical distribution of appendicitis as the number of cases seen here is greater in proportion than in New York City. The question of its relation to rheumatism might be mentioned as more cases are seen where rheumatism is common than in nonrheumatic regions. From the structure of the appendix could not it be held to be the tonsil of the abdomen? The liability of the faucil tonsils to inflammation in persons of a rheumatic diathesis suggests one possible cause of trouble in the appendix, as it may be a local manifestation of this diathesis. The concretions in the appendix and the tonsils are very similar—both are subject to catarrhal and septic inflammations.

Dr. INGRAHAM stated that all he knew about appendicitis he had learned by association with Dr. Mynter and in days gone by he thought that Dr. Mynter considered every one who had not had their appendix removed to be suffering from an appendicitis.

Dr. CONGDON thought that the stumbling block to all was the impossibility of recognising positively between the different forms as catarrhal and septic appendicitis.

Dr. MYNTER, in closing the discussion, said that may be appendicitis was rheumatic in origin or that a rheumatic diathesis had a bearing on the liability to the disease, but what difference did that make on the treatment, when the trouble had undergone the well known pathological lesions. He thinks the geographical distribution, so-called, is simply due to the fact that the cases are not recognised as appendicitis and are not treated as such. In investigating the statistics in Denmark he found the same relative proportion there that we find in this country. He does not do a laparotomy on every case of "belly-ache," as would seem from a former statement of one of the members, but his rule is, keep the patient quiet with enough opium to moderate the pain; if the patient does not begin to improve within 24 to 36 hours from the beginning of the attack, and there is still muscular retraction, pain, and the like, go in at once. All cases of every form get well if operated before 48 hours have passed since the attack began. In the worst forms all die if left until after the 4th day. The danger lies not in the operation, but in the disease. In the gangrenous forms, after the 4th or 5th day, the proper method is to make a simple incision into the abscess cavity, as the trouble will be walled off by that time, and let out the contents of the cavity. Do not in these cases go into the general peritoneal cavity. No disease in the doctor's mind is simpler to diagnose than an appendicitis.

In speaking of the grave lesions that may exist with slight subjective symptoms, he recalled a case that he had seen shortly at the Falls. A telephone message told him to go down there to do an appendicitis or a hysterectomy—the attending physician did not know which. He found a young woman who had been sick for a week. She was pulseless, cold, and in great shock; though mind was perfectly clear and she was not suffering from a toxemia. The belly was flat, and there was tenderness over the right ileo-cecal region. After an intravenous injection of normal saline solution the belly was opened and to his surprise he found an intussusception three feet long and totally gangrenous. A median incision was then made and the gut pulled out and the gangrenous portion resected. The mesenteric vessels was so thrombosed that when he grasped one of them he could squeeze out the clot, with which the vessel was filled, like an angle worm. The wound was left open and packed with gauze. The patient lived

36 hours and then died. This illustrates what frightful lesions may exist without the usual symptoms accompanying such a case.

Attendance, 34.

Section on Pathology, Tuesday, December 19, 1899.

REPORTED BY FREDERICK H. MILLENER, M. D., Secretary.

THE fourth regular meeting of the Pathological Section for the season was held on Tuesday, December 19, 1899. The meeting was called to order by the secretary in the absence of the chairman, Dr. Bennett, at 8.50 p. m. On motion of Dr. Jones, Dr. ABBOTT was chosen as temporary chairman, and the minutes of the preceding meeting were read and corrected.

The papers of the evening were Intestinal obstruction from adherent Meckel's diverticulum, by Dr. Irving M. Snow, and The pathological condition of the middle ear, requiring radical treatment, by Dr. George F. Cott.

Dr. IRVING M. SNOW reported two cases and an autopsy, with specimens. The first was as follows:

Patient, a boy of three years, in good health up to the present illness. November 9th, fell a short distance from some steps, hitting himself upon abdomen, to right of umbilicus. No bad effects followed the accident. In fact there was complete relief in an hour. November 11th, the child ate quite freely of grapes and there is some reason to believe that this dietetic indiscretion was the exciting cause of the intestinal obstruction, by causing increased peristalsis and intestinal irritation. November 12th, the boy had a normal fecal passage, but commenced vomiting and vomited persistently for several days, until November 16th. During this time in spite of enemata and laxatives, the bowels remained obstinately constipated; no passage for five days. There was also present intense abdominal pain, nearly continuous, with occasional temporary relief for a few minutes. This pain was so intense as to require opiates, which was given on November 14-15-16th. When the child was asked where it hurt him, he pointed to the umbilicus. The abdomen was not tender on palpation. No tumor or induration was to be felt. The belly was slightly distended. The contents of the cecum could be plainly felt. There was gurgling and rumbling in the abdomen—only slight fever, .5 to 1.c. November 16-17th, the little patient failed visibly. Its expression was bad, face anxious and sunken; expired November 17th, 6 a. m.

Case II.—Well developed child lying in bed. Child slightly narcotised. Respiration, 12; pulse, 120; regular temperature, 99.

Slightly sighing respiration from abdominal pain; tongue slightly coated; lung, heart, skin, throat regular; rectal examination regular; no hoarseness, no abdominal tumors; liver and spleen normal; urine normal. Abdomen somewhat distended; tympanitic. Child had been nourished by enemata. Late in the afternoon the child vomited fecal matter. An injection was given; the effect of this was to cause intense abdominal pain. The child writhed with colic, vomited fecal matter and went into profound collapse. After several hours the child had small fecal stool, containing three grape seeds. The injection was followed by the passage of considerable wind and a subsidence of the abdominal swelling. Careful palpation of the relaxed abdomen revealed no tenderness nor abnormal swelling. November 18th, child apathetic, frequently sighed, occasional abdominal pain, abdomen slightly distended. Respiration, 12; temperature, 99.5°; pulse, 120. November 18-20th, same condition; after this date the pulse jerked rapidly, requiring hypodermic stimulation. There was also visible peristalsis from the 18th until death. November 22d, patient again commenced to vomit fecal matter. A quart of olive oil was given per rectum. A fecal stool, containing grape seed, followed by flatus, was the result of this procedure. No fecal matter was vomited after the enema. There was also a noticeable swelling of the abdomen. Nevertheless the patient rapidly failed, dying November 23d at 11 p. m., after an illness of twelve days. The cause of death was shock, pain and return of vomiting from intestinal obstruction. During the illness rectal alimentation was used, champagne being the only remedy retained by the stomach.

Autopsy.—No peritonitis; appendix healthy. The cause of the symptom was the snarling of a cord of ileum on a loop, formed by an intestinal diverticulum, attached to the ileum and connected by a small ligament to the mesentery, close to the ileo-cecal valve. More exactly stated, 12 to 14 inches from the ileo-cecal valve there projected from the ileum a glove-finger shaped process of intestine, from the free end of this diverticulum (Meckel's) proceeded a fine fibrous ligament attached to the mesentery, near the ileo-cecal valve. The diverticulum and ligament formed a loop, going one and one-half times around the ensnared intestine. In the loop Meckel's diverticulum lay uppermost, forming the upper and about one-half of the lower portion of the constricting cord. The ensnared intestine was the portion of the ileum between the insertion of the diverticulum and the ileo-cecal valve. The neck of this cord was not tightly compressed, but could be slipped to and from very easily. The lumen of the bowel was not obliterated. Above the obstruction some olive oil was floating. No fecal matter found in the intestine. Above the obstruction the intestine was slightly distended.

The case was discussed by Dr. Benedict and Dr. Williams, the latter stating that it was rare, he having only come across it once before at post mortem.

The next paper was that of Dr. GEO. F. COTT, on the
PATHOLOGICAL CONDITION OF THE MIDDLE EAR, REQUIRING RADICAL
TREATMENT.

The essayist called attention to the fact that acute middle ear suppuration seldom calls for radical interference; it more often causes mastoid abscess and can readily be treated with success. The cases which are usually referred to the aurist are such as follow zymotic diseases—typhoid and scarlet fevers, diphtheria, measles, and the like. They have generally been neglected and consequently often cause caries. Some of these cases are cured by removing carious ossicles, scraping out granulation tissue, polypi, etc.

The gross anatomy was gone over and the relations to important structures, which are easily injured by operating. The different channels of infection were then mentioned. The paper closed by recommending radical treatment in all cases of caries, which cannot be relieved by all ordinary methods and in sufficient length of time.

The paper was discussed by Drs. Keiser and Howe.

Dr. Keiser stated that he concurred in the main with the view expressed by Dr. Cott, but thought that the reason the operation had not received heartier indorsement was the difficulty met with in securing the patient's consent, whose subjective symptoms were in the majority of cases comparatively nil. He thought that the indications for the operation should be summed up as follows: First, persistence of fetid discharge from the middle ear, after all other therapeutic measures have been exhausted; second, central caries or necrosis manifested by the existence of a fistulous opening over the mastoid region; third, frequently recurring mastoiditis in the course of otitis media purulenta; fourth, facial paralysis; fifth, optic neuritis, occurring during the course of middle ear disease.

Dr. HOWE congratulated the writer on presenting this subject which apparently had been neglected in medical discussions, if not in practice. The radical operation, however, he considered indefinite as the simple opening of the mastoid was to a considerable extent unreliable. To be exact, the technique should be followed as first formulated by Stacke and Zaufal. This form of operation on the mastoid was probably one of the most valuable we have, not only as a cure for purulent inflammation of the middle ear, but as saving many a patient from a meningitis, with all of its dangers.

Attendance, 25.

*Section on Ophthalmology, Otology, and Laryngology, first meeting held
Monday Evening, January 8, 1900.*

Reported by RICHARD H. SATTERLEE, M. D., Secretary.

THE meeting was called to order at 9 p. m., Dr. W. S. RENNER in the chair.

Dr. J. C. CLEMESHA presented a case of tuberculous tumor of the nasal septum. The history was as follows:

Mary M., aged 24, unmarried, came to the Buffalo Eye and Ear Infirmary in June, 1898, for swollen eyelids and tears running over the face. The condition had then existed a year. She had treatment by an oculist without deriving any benefit. Past history negative, excepting a mild attack of typhoid fever in 1893. Her father had died some years ago from typhoid fever. Her mother in childbirth. She was the only child. Her condition at this time showed her face had broadened as compared with a photograph taken two years previously. Her eyelids somewhat thickened and show translucent folds. The *alæ nasi* wider and there is a slight flush over each cheek with a peculiar papular eruption. The forehead is swollen, but no pitting on pressure. Her general expression heavy and dull. The hair has become two shades darker, but is neither scanty nor dry, as is usual in myxedema. The tongue and mucous membrane of the mouth and nose show no change, though her voice has altered, having become monotonous, deliberate and slow. Her teeth have decayed rapidly during the past year. Hands always cold, the nails stunted and brittle. Temperature normal, catamenia regular; urine, specific gravity 1.023; no albumin or sugar. Examination of the neck reveals an atrophic condition of the thyroid gland, more pronounced on the right side. She was put on thyroid extract and rapidly improved, mentally and physically.

In June, 1899, she complained of inability to breathe through the right nostril, and on examination a tumor was seen growing from the cartilaginous portion of the septum. The mass was smooth, soft and grayish pink in color. It was easily removed with a snare and thought perhaps to be a myxoma. In the course of four or five months it recurred and was again removed and the tissue submitted to Dr. Gaylord of the State Pathological Laboratory for examination. The report read as follows: "The specimen removed from nasal septum proves to be a case of tuberculous infection of the membrane of the nose. There are distinct tubercles and areas of disseminated infiltration involving the connective underlying the mucous membrane proper."

Tuberculous disease of the nose is generally held to be exceedingly rare. Rice cites the fact that in 476 autopsies Willigk found one case only, and states that it may occur either as an ulceration on the nasal septum and floor and resembling tuberculous ulcerations in general, or as small papillary growths, attached to the turbinated bodies. Chiari reports six cases. He says it is a rare affection,

seeing that between 1889-93 he only observed six cases out of 6,000 patients. Generally an ulcer first appears from whose edge there rapidly arise granulations that soon become confluent. The tuberculoma is red, covered with mucus or crusts with irregular bleeding surface and fairly soft. There is no pain. Later it may lead to perforation of the septum. Volkman has expressed the belief that many cases of supposed hereditary syphilis were in reality tuberculosis, while on the other hand tuberculous cases are sometimes mistaken for lupus and even malignant disease.

Tubercle of the nasal mucous membrane is generally described as occurring in the form of tumors growing from the cartilaginous septum and varying in size from a small granulation to such a bulk as would completely fill the nasal fossa. The surface is smooth or irregular, granular, covered or not with epithelium, and varying in color from a gray to a dark purple. The tumors bleed easily on examination with the probe, the inner portion being harder than the periphery. After removal they show a strong inclination to recurrence, while the site from which they have been removed indicates great reluctance to heal. Ulceration consequently results and sometimes perforation of the septum. Tuberculous ulceration of the mucous membrane sometimes appears far more intractable than the actual tumors and is generally accompanied by a purulent and sometimes fetid discharge.

There is nothing pathologically to distinguish the products of tubercular disease of the pituitary mucous membrane from the same affection elsewhere. Suffice it to say, that in the granulations and tumors, giant cells may or may not be found while the absence of bacilli is not necessarily an argument against the tuberculous nature of the growth.

The diagnosis is exceedingly difficult, seeing that the factors are so little constant. The chief diseases for which it might be mistaken are lupus and syphilis, seeing that in both of these we may have the co-existence of neoplasm and ulceration. In this connection it must not be forgotten that as lupus and syphilis may coexist so may tubercle and syphilis. The prognosis is very unsatisfactory so far as ultimate recovery is concerned. For though the tumors may be eradicated and the ulceration persuaded to heal, yet there is a strong tendency for the cicatrices to break down again. The treatment consists in the eradication of the growths and granulations, either with a sharp spoon or an electric cautery and suitable applications to the parts exposed, the treatment being conducted on rational principles, and it is highly questionable whether any of the new supposed specifics are of any service.

DISCUSSION.

Dr. E. E. BLAAUW considered that a diagnosis should only be made on the clinical as well as microscopical appearances. He seemed sceptical as to the disease, being tubercular with such a family history and no other lesion.

Dr. LUCIEN HOWE inquired the differential diagnosis, and if the swelling of the lids was not due to some other condition.

Dr. F. H. MILLINER noted the perforation and inquired what other symptoms were present to determine the tubercular character of the growth, other than the findings of the microscope.

Dr. W. S. RENNER said that cases were cited by Garrish where there are localised tuberculosis with no other symptoms elsewhere. Most of these tumors undergo tubercular infiltration after operation.

Dr. CLEMESHA in summing up said that he could discover no other cause for the lids swelling. There was nothing to indicate any involvement of the optic nerve; there were no other symptoms to indicate the tubercular character of the growth; no swelling of glands elsewhere and the pharynx and lungs seemed normal.

MUSCULAR DYNAMICS.

Abstract of paper presented by Dr. Howe at the first meeting of the Ophthalmological Section was as follows:

1. Little was known of the movements of the eye previous to the middle of this century, but then a sudden impulse was given to study in that direction which within a few years gave us most of the actual facts in our possession, concerning muscular dynamics, both in a normal and in an abnormal condition.

2. These facts which were then buried, principally in Græffe's Archives of Ophthalmology, have been largely forgotten or ignored. During the last few years there has been a mass of literature relating to so-called eye strain, but few investigations based on physiological studies.

3. If we take the primary position of the two eyes as a starting point for any study we find that established fact conflicts with two respects—with modern theory—namely, (a) That in the first position when the muscles are relaxed the visual axes are not parallel in all cases. In other words, that so-called orthophoria can only be expected in the normal eye in little over half the cases. (b) That the vertical meridian which theoretically should be absolutely vertical really tends to incline outward, and that this tipping outward or torsion of the axes increases with accommodation.

4. That although this principle has long been known and latterly ignored, the modern plans for its measurement are not as accurate as those established many years ago.

As an instance that many eyes are abnormal as to their muscular balance, Dr. Howe cited the test of 100 soldiers by Bannister, who

concludes that the visual axes may normally tend to turn in or out, or in other words, these conditions may exist without any reflex disturbance. Bannister found a slight heterophoria in over 40 per cent. of the cases examined without any disturbance from muscular unbalance whatever. Dr. Howe wished to call attention particularly to, first, the fact that all eyes are not exactly parallel and, second, the new theories begot the real state of affairs.

Dr. BLAAUW—I think Dr. Howe is right, we must go back instead of accepting all the new theories. Most of the eye troubles in America are due to eating too rapidly. Dr. Landolt is right in saying that most eyes diverge a little bit. Some people complain when they have slight muscular defects; others do not seem to notice quite serious muscular defects.

Dr. BENNETT—I hardly think we can lay much stress on the result of Bannister's tests. Soldiers do not use their eyes for close work very much. The people who notice the muscular weakness are clerks, sewing women and people who have to use their eyes for close work. In these cases a slight defect often means considerable disturbance.

Section on Medicine, Tuesday Evening, January 9, 1900.

REPORTED BY J. C. CLEMESHA, Secretary.

THE fourth regular meeting of the Section of Medicine was held at the Academy parlors, Market Arcade, January 9, 1900. Meeting was called to order at 8.30 p. m. Dr. E. H. LONG in the chair. Minutes of the last meeting were read and approved.

ACUTE APPENDICITIS.

Dr. DELANCEY ROCHESTER read a paper on The treatment of acute appendicitis. He commenced the paper by relating the history of a case.

A girl who suffered much from chronic constipation and who was treated by him for intestinal obstruction, due to fecal impaction. During her convalescence by carelessness and disobedience to orders, she developed an acute appendicitis, which was treated by very large doses of morphia and an icebag to the abdomen. The morphia was pushed so that when sleeping her respirations were from four to six per minute. She recovered and later on during the interval her appendix was removed. The whole point in the treatment hinged on the large doses of morphia and Dr. Rochester related a case where, in a boy five years, he administered one quarter a grain of morphia every two hours for seventy-two hours.

DISCUSSION.

Dr. H. R. HOPKINS said that the great difficulty was in the diagnosis of the exact condition. He had seen many die treated by the method Dr. Rochester extols, yet still believes it to be the best method in the country and at a distance from expert surgeons and well equipped hospitals. Some cases cast a heavy weight of responsibility upon the medical attendant, and while the great majority of cases do well under the Alonzo Clark method, there is a certain group of cases that inevitably die.

Dr. EUGENE SMITH took up the statistics of the surgical treatment. Good surgeons have a mortality of from 2 to 5 per cent., while under medical treatment 6 to 20 per cent. die. Dr. Smith considers that there are two great dangers connected with the medical treatment of acute peritonitis: (1) Gangrene and general peritonitis; (2) false hopes in regard to subsequent attacks. Dr. Smith wished to know the danger in operating in acute attacks of appendicitis.

Dr. INGRAHAM spoke of his early practice at a time when Dr. Alonzo Clark introduced his treatment of these conditions. He said from his own experience he did not think morphia did any good and always advised an immediate operation.

Dr. CONGDON would only consider the Clark method of treatment in cases situated where it was impossible to get proper surgical aid.

Drs. Howe, Bayliss, Benedict and Thoma also discussed the paper, after which Dr. Rochester replied.

The paper Typhlitis and scolecitis, to have been read by Dr. A. L. Benedict, was put over until May 8, 1900.

Meeting adjourned 10.30 p. m. Members present, 25.

Abstracts.

DIET IN TYPHOID FEVER.

SHURTLEFF, FRED C., (*Southern California Practitioner*,) Los Angeles, Cal., says: Much has been written both pro and con in reference to this or that article for diet in the management of typhoid fever. It is a settled fact that the food must be fluid, highly nutritious and easy of digestion, for the maintenance of nutrition is imperative in this wasting disease. Milk is probably the most extensively used and will form the main article of diet so long as fever lasts. I have used milk in nearly all its various forms in the care of my cases from frozen or boiled sweet milk to butter milk, from sweet milk, or milk with lime water, to that partially digested with pepsin or pancreatin when

digestion was enfeebled. The tendency in milk diet is to overfeed by forcing too large quantities at one feeding and thereby cause disgust for that diet upon which we have pinned our faith. If one insists upon an absolute milk diet, not infrequently will you find your patient has gone without it rather than take it. Patients fret under its administration, digestion is interfered with, curds swarming with bacteria of decomposition are found in the increased diarrheal discharges, plus the bacteria of typhoid fever already existing, hence the object which we wish to attain so far as it is possible—that of rendering the gastro-intestinal tract aseptic—is defeated from the outset by error in diet. I have often been puzzled as to what to substitute for milk in this class of cases until the stomach became more tolerant. I have tried various farinaceous substances and discarded them on account of the increase of flatulency they almost invariably produced.

For some time past I have tided my patients over their critical period by tablespoonful doses of liquid peptonoids every two hours, giving nothing else in the way of nourishment but the above remedy. I cannot speak too highly of this elegant preparation where digestion is below par, as a highly nutritious food that will not curdle upon the stomach or leave a residue in the intestinal tract. It is a slightly stimulating food, consequently patients, as a rule, will require less alcoholic stimulants, a great desideratum in some cases. I do frequently carry through my cases of typhoid successfully, where no other article of diet is given from the time I make the diagnosis until convalescence is firmly established, and I call the attention of the profession to it for that class of cases in which milk cannot be taken.

ACUTE RHEUMATISM.

MEIER, G. C. H., (*American Therapist*,) states that his experience with the salicylates during the past twenty years has convinced him of the difficulty of administering them in many cases, even if given in capsules or wafers; many patients object to salicylate of sodium on account of the resulting disturbances of the stomach, as evidenced by nausea, distress in the epigastrium, and even vomiting. Occasionally, he has also witnessed headache, tinnitus and vertigo during its use. These disadvantages of the salicylates have led him to experiment with aspirin, a new combination of salicylate acid and acetyl, which passes unchanged through the stomach, and is not decomposed until it reaches the intestinal canal, thus avoiding any action upon the stomach. He has given aspirin in the same dose as salicylate of sodium, and owing to its insolubility has generally placed the desired dose upon a tablespoon, adding some sugar and water. From his experience with aspirin up to date, he considers himself able to assert that its effect differs in no wise from that of salicylate of sodium, and that it has the great advantage of being entirely devoid of troublesome effects upon the stomach. This is well illustrated by the twelve cases which are reported in full in his contribution.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges should be addressed to the editor: 284 FRANKLIN STREET, BUFFALO, N. Y.

VOL. XXXIX.—LV. FEBRUARY, 1900.

No. 7.

PROFESSIONAL EDUCATION.

A MOST instructive monograph has been written recently on the subject of professional education by Mr. James Russell Parsons, Jr., Director of the College and High School Departments, in the University of the State of New York, and since January 1, 1900, secretary, *ad interim*, of the University. This monograph is No. 10 of the series on education in the United States, edited by Professor Nicholas Murray Butler, of Columbia University, to be contributed to the United States educational exhibit by the State of New York at the Paris Exposition of 1900.

While the monograph was prepared primarily for those who propose to visit the exposition, as the author states, yet it is full of interest to all who are concerned in professional education. It shows in clear and concise manner the development of professional education in this country from the colonial period to the present, and is illustrated by a colored map and numerous diagrams. It tells students what they want to know in regard to the preliminaries required for entry into the professions, and it informs them what must be done to attain diplomas and licenses to practise after they have passed the collegiate entrance door.

The book deals with educational questions under the several heads of general education, theology, law, medicine, dentistry, pharmacy and veterinary medicine. All these several departments are considered in detail, their rise and progress set forth, their present status unfolded, their strength, standing and numerical attendance given, the libraries, endowments and plants they possess described, and their general financial condition recorded.

Of especial interest to physicians, however, is the section devoted to the consideration of medical education under the title, Medicine. It tells us that there were two medical schools in the colonies, the Medical College of Philadelphia (now the medical department of the University of Pennsylvania), organised in 1765, and the medical department of King's (now Columbia) College, organised in 1768. There are now 156 medical schools in the United States, of which 3 were established between 1765 and 1800, 12 between 1801 and 1825, 22 between 1826 and 1850, 33 between 1851 and 1875, and 86 between 1876 and 1900. In these 156 schools there were in attendance during the year 1899, 24,119 medical students, the increase in medical students in 21 years having been 142 per cent.

We are further told that for nearly a century there were practically no requirements in preliminary general education for admission to medical schools. In 1839 the Medical Society of the State of New York resolved that teaching and licensing ought to be separated as far as possible, and a similar view had been announced in Philadelphia two years before. In the development of higher standards New York passed a law that went into effect in 1891, providing certain preliminaries, extending the period of study in the schools, and establishing a final examination for license by a separate board. Under this law as since amended 4,808 physicians have been examined, of whom 3,722 were successful, or 77.5 per cent. If to them are added those who failed to meet the requirements for admission to the examinations, it will appear that more than 30 per cent. of all candidates have failed to secure licenses. When we consider that admission to the licensing examinations is predicated upon supposed preliminary education as well as a diploma from a duly registered medical school, the results seem somewhat startling; nevertheless, they furnish a complete justification of the system. A somewhat remarkable fact in relation to the subject is that the advanced requirements for license have been accompanied by a great increase in property holdings of the medical schools, whereas the reverse had been predicted and might have been at least temporarily expected.

One of the most perplexing questions that appears in relation to state license is interstate reciprocity, or recognition by endorsement. The National Confederation of State Medical Examiners has been studying, debating, and trying to solve the problem ever since it was organised, now some nine years ago. Lately the Wayne County (Michigan) Medical Society, probably impatient with the delay on the part of the Confederation, has sent circulars to licensing boards asking

if reciprocity between states having equal standards would be desirable, and if, where such is not the case, statutory amendments would be advocated. This is like threshing over old straw, as the Confederation had done all this in its earlier inquiries. Of course, many favorable answers were received, but, as Mr. Parsons sententiously remarks, statutory amendments with few exceptions are found essential to establish the principle. Mr. Parsons further points out that a uniform standard for admission to practise in all the states is impracticable at present, because of varying conditions as to the density of population, educational advantages and general development. He states that weak states cannot establish standards demanded elsewhere and strong states cannot afford to lower their standards to meet the demands of the others. He, however, suggests as a remedy for the present needless and unfortunate multiplication of standards, that two or at most three standards be established for all the states, and that they be grouped according to their conditions. Naturally, under such a plan, in the first group would appear the states with the highest standards and these would act as a stimulus to the lower grade groups.

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The State of Michigan ~~only~~ recently enacted a practice law, hence the zeal of youth in this matter of reciprocity can be easily understood, but before it proceeds much further in the premises it might be well for it to improve its record in one respect, for we are told by this monograph that it is one of the states in which osteopathy is recognised by law. As a matter of fact the first question of great importance relates to the establishment of a uniform minimum standard of preliminary education for admission to the study of medicine. When this is once agreed upon the problem of reciprocity of licensure will be more readily solved.

The section on medicine closes with a synopsis of present requirements to enter upon practice in all the states and territories, from which it appears, that in thirty-two diplomas do not confer the right to practise, a separate state examination being required of all; in five, the approval of medical diploma by duly qualified boards is sufficient; in nine, licensing examination only is required; while in fourteen political divisions, either approval of medical diploma or examination by independent boards are requisite. Alaska and Kansas have no examination boards.

This is a most interesting brochure, full of practical information and has been prepared with great care. It exhibits the hard work of an expert in all its sections, and will prove of great service to every

educator. Besides, it will be a credit to the educational exhibit at Paris, for which it is more especially designed. Mr. Parsons is a graceful writer, a master of statistics, and an administrative officer of great accomplishment.

THE SWEEPING TRAIN.

THE woman with sweeping train is here. If one takes the pains to consult those learned in the fashion of woman's dress, or if he cares to glance at the various magazines devoted to this important topic, he will learn that she is likely to remain some time. Now there are various reasons why a medical journal should interest itself in the question of woman's attire. If woman's dress is so unhygienically constructed as to be a menace to her health or the health of those about her, it becomes the duty of those better informed to acquaint her of the fact, and so thoroughly has this been done in regard to the corset that the woman who puts around her waist a tight and unyielding girdle does so with the full knowledge of the consequences. She harms no one but herself, and if she can stand it, the physicians who ultimately profit by her folly certainly ought to be able to.

Possibly, however, the woman with the train does not fully comprehend what she is doing when she permits herself to become an adjunct to the street cleaning department. And that she may no longer have the cloak of ignorance to cover her unwisdom the JOURNAL begs leave to inform her of the following facts: Dust collected in street cars, streets, and public places has been found to contain tubercle bacilli, pus organisms, tetanus bacilli, the bacillus of malignant edema, and the bacillus of diphtheria. These, madam, with others less harmful, your long skirt carries into your home, there to be shaken or brushed out and inhaled by more or less susceptible persons! Under favorable conditions the trailing dress may collect and carry indoors the virulent germs of almost any of the infectious diseases.

So much for the sanitary side of the question. There is another appeal which will carry more force. The omnipresent germ has come to be regarded as a bogey which the medical man uses to frighten grown-up children away from various kinds of foolishness. Cannot the lady with sweeping train be roused to a realisation of the eternal fitness of things? She is not out of place in her own or a friend's home or at various social functions where her dainty skirts trail over

clean floors or carpets. Indeed, such dress worn on proper occasion adds grace and beauty to its wearer, but let her dress in harmony with her surroundings and spare her fellow creatures the distress of witnessing her desperate and usually vain attempts to hold her skirts clear of the filth of the street or the disgust of seeing a trailing skirt, the bottom of which is filled inches deep with dirt.

On its own authority the JOURNAL would not dare prescribe the proper length of a street skirt. The subject is fraught with danger. The golf skirt, which in this latitude seems to be a modest garment, has been barred in the school-room by the school board of Louisville. A praiseworthy organisation, known as the Rainy Day Club, sends out from its headquarters in New York City, a circular which among other things describes the costume the club's members are required to wear on inclement days. "The skirt shall not be more than six nor less than four inches from the ground." The JOURNAL endorses this decree. It appeals to women to consider thoughtfully the subject of becoming street attire. Is not that woman best dressed whose garments are best adapted to the place and circumstances of the wearer?

ANTIVIVISECTION REDIVIVUS.

THE antivivisectionists are again on the warpath led by that old battle-scared veteran Senator Gallinger, of New Hampshire. He has marched up the hill and marched down again several times before in similar campaigns, and we hope he may be put to rout so completely this time that there will not be left "a shirt and a half in all his company."

There is, however, a very serious danger threatening the interests of experimental medicine and all studies of diseases of the lower animals. The antivivisectionists are resorting to every subterfuge to carry their pet bill through congress. They are appealing to the sympathy of tender-hearted men and women, are uniting their forces in strong aggressive opposition to vivisection, and are growing more determined year by year. They publish books, periodicals and brochures on the subject, which they distribute broadcast with a lavish expenditure. Even novels and storiettes are written with a view to prejudice or influence the weak or indifferent, Mrs. Elizabeth Stuart Phelps-Dodge having lately contributed a little of her "Loveliness" to the cause. Her story, however, is so improbable on its face that it will tend to strengthen rather than weaken the side of our inclining.

Dr. Charles E. Congdon, of this city, very opportunely invited attention to this subject at the recent meeting of the Medical Society of the County of Erie, asking the society to array itself in opposition to Senator Gallinger's bill. The legislative committee was empowered to oppose the measure according to its discretion.

The president of the American Medical Association, Dr. W. W. Keen, of Philadelphia, has addressed an open letter to the profession, which sets forth the dangers and importance of the situation and suggests definite action. We take pleasure in presenting it in full as a part of this appeal to our readers to take steps at once looking to the defeat of this unscientific and unhumane piece of legislation. It is as follows:

TO THE MEMBERS OF THE MEDICAL PROFESSION IN THE UNITED STATES :

THE cause of humanity and of scientific progress is seriously menaced. Senator Gallinger has again introduced into Congress the Bill for the "Further Prevention of Cruelty of Animals in the District of Columbia," which he has so strenuously and misguidedly advocated in the last two Congresses. It is Senate Bill No. 34. Twice the Committee on the District of Columbia has, also unfortunately and misguidedly, reported the bill with a favorable consideration. It is speciously drawn to seem as if it were intended only in the interest of prevention of cruelty to animals, but the real object is twofold : 1, to prohibit vivisection and, 2, to aid the passage of similar bills in all the state legislatures.

It hardly needs to be pointed out that this would seriously interfere with or even absolutely stop the experimental work of the Bureau of Animal Industry and the three medical departments of the Government, the Army, the Navy, and the Marine Hospital Service. The animals themselves might well cry out to be saved from their friends. No more humane work can be done than to discover the means of the prevention of diseases which have ravaged our flocks and herds. All those who raise or own animals, such as horses, cattle, sheep, pigs, chickens, etc., are vitally interested in the preservation of their health and the prevention of disease.

The inestimable value of these scientific researches as to the prevention and care of disease among human beings it is superfluous to point out. Modern surgery and the antitoxin treatment of diphtheria alone would justify all the vivisection ever done.

As my attention has been called officially to the introduction of the bill, I take the opportunity of appealing to the entire profession of the country to exert itself to the utmost to defeat this most cruel and inhuman effort to promote human and animal misery and death and to restrict scientific research. It is of the utmost importance that *every physician* who shall read this appeal shall *immediately* communicate especially with the senators from his state, shall also invoke the aid of the representatives from his or other districts in his state, and by vigorous personal efforts shall aid in defeating the bill.

It is especially requested also that all of the national, state and county societies, at their next meeting, take action looking toward the same end. If regular meetings are not soon to be held, special meetings should be called. Correspondence is invited from all those who can give any aid.

The Committee on the District of Columbia consists of Senator James McMillan, Michigan, Chairman, and Senators J. H. Gallinger New Hampshire; H. C. Hansborough, North Dakota; Redfield Proctor, Vermont; J. C. Pritchard, North Carolina; Lucien Baker, Kansas; C. P. Wetmore, Rhode Island; C. J. Faulkner, West Virginia; Thomas S. Martin, Virginia; Wm. M. Stewart, Nevada; and Richard Kenney, Delaware. Personal letters may be addressed to them or to other senators. Petitions should be addressed to the Senate of the United States.

W. W. KEEN, M. D.
President American Medical Association.

LAPIDOTHERAPY.

A HANDFUL of Parisian specialists who have threshed other fields dry, have sprung a new fad on the public in lapidotherapy. As its name suggests this new treatment consists of the overthrowing of disease and pathologic conditions by the application of precious stones. It has not yet been made public how the gems are employed or what stones are used for the different diseases. Still it should be no difficult matter to apply lapidotherapy. As an illustration let us take twentieth century melancholia. The layman would designate this very common complaint as plain "blueness" resulting from lack of money and the luxuries of life. How easy it is to cure it by means of the newest therapeutics.

Such a case as the following might not be out of place in the new work reports:

Case I.—M. Pierre Tazelot, aged 30, a poor but honest porter; married; he has a wife also several children who display the same symptoms. Previous to his marriage he was of a shiftless nature, but when M. le Cure pronounced him a husband he was forced to obtain employment. From this time his symptoms began to be manifest. At the birth of each succeeding child these symptoms became greatly aggravated, and he finally came to me for treatment, after vainly trying to get relief at the old Saltpeter Hospital and the Charcoal clinic. At this latter place he was much improved during the treatment, believing himself an engaging personage of the empire. On ceasing the treatment he grandly ordered a gendarme to draw a million francs from his treasury and was immediately arrested.

When he came to me he suffered great depression of spirits. He could not satisfy his appetite. He was earning but a poor, miserable, one franc a day by working from three o'clock in the morning until midnight. When his day's work was completed he suffered great lascitude and immediately fell into a deep slumber. Owing to the time of his being forced to go to work, he could not sleep more than three hours. I at once placed him under treatment. On the little finger of his left hand I placed a large diamond of exquisite brilliancy, held in place by a band of gold, and ordered him to return to me in a week. When he returned his eyes were bright, he walked with a springy step, his clothing was good, his skin was pink with health, and he was smoking a Turkish cigarette. He informed me now that he only worked six hours a day, and could sleep eight and ten hours. His family he said had almost entirely recovered. He thanked me effusively for the great good I had done him and requested that I send my bill to him at my leisure.

In going he informed me that M. Einstein had given him 30,000 francs for the diamond. This I consider my best case. Here was a poor man with a large family, all practically starving to death, when lo! he is cured by an application of the diamond and his grave malady is no more. Truly he is a monument to lapidotherapy. I trust my American brothers who have so much money will take up the new treatment. I shall advocate the establishment of government dispensaries, of which I shall be the dispensing officer. Viola! I shall be famous and rich.

DR. J. B. COAKLEY discussed a most timely and absorbing subject in his presidential address at the last annual meeting of the Medical Society of the County of Erie. The water supply of a great city and the disposal of its sewage are two questions that are in juxtaposition and greatly concern every inhabitant.

It was a fortunate circumstance that members of the board of public works and other city officials were present and participated in the discussion that followed the reading of the paper. They exhibited great interest in it and betrayed in their remarks a studious knowledge of all its bearings on the public welfare. No one after listening to them could question their fitness for their several places in the city government. The great question at this time is the prevention of the pollution of the water supply. The disposal of sewage is the one great problem to deal with. If the source remains uncontaminated by human waste products and other germ-infected material the supply will be healthful no matter where the intake is located. We hope that

the discussion of the subject which Dr. Coakley introduced with such intelligence, judgment and fearlessness will lead to prompt action. A full report of the proceedings of the meeting is published elsewhere in this magazine. The address itself will be printed in the March edition.

THE pollution of the water supply of cities is attracting attention in several localities at the present time. The cities in New Jersey along the Passaic River are very much disturbed, and very properly so, over the fouling of that stream by the sewage of towns situated along its shores.

Meetings are being held and prompt action is urged at each to prevent the further development of the evil and to correct its present deplorable state. In some instances the courts have been appealed to and in others such a course is threatened.

A recent outbreak of typhoid fever at Trenton, N. J., has led to an investigation and the suspicion has been aroused that its own water supply is not what it should be. Since there is no longer any question in the minds of the well-informed members of the medical profession that typhoid fever is a water borne disease, it does not take very long to locate the cause of an endemic of the malady. The people are not slow to determine in their own minds that it is not best to locate in or even visit a city in which the water supply is a dilution of sewage.

Dr. W. A. Scott, of Niagara Falls, has pointed out the cause of typhoid fever in his city, which is traced to pollution of Niagara River by the sewage of Buffalo. It will not answer for us to permit our fair name to be smirched, or for us to be threatened with damage suits, because our sewage befouls the water supply of our neighbors, to say nothing of the importance to ourselves, to our own health, of drinking pure, uncontaminated, sewage-proof water.

AN ASEPTIC office is something of a novelty, even in these days of ultra asepticism; yet there is one such in Buffalo. Dr. D. W. Harrington recently built an addition to his suite of offices at 1430 Main Street, which certainly as nearly approaches the aseptic state as it is possible for such an apartment to do.

Its general shape is that of an oblong square, about 14 x 20 floor area; it is built of glass, iron, copper and tile, with gable roof, heated with natural gas burning in a fireplace, and ventilated from the roof and sides. The floor is of inlaid mosaic tiling, the mantel and sides

half way up are wainscoted in white glazed block tiles, the remainder of the sides and the roof are built of glass. Over the mantel rests an aquarium well stocked with fishes and supplied with running water, hanging baskets and brackets containing plants adorn the room, on a glass and iron center table sets a microscope, a lounge and easy chair in leather, together with desk, bookcase and a few other necessary articles of furniture, go to make up one of the most delightful offices for a physician that we have ever seen.

PERSONAL.

DR. C. B. BURR, of Flint, Mich., medical superintendent of the Oak Grove Hospital for the Insane completed his twenty-first year of hospital work November 24, 1899, on which occasion a delightful surprise was arranged by his friends, who presented him with a loving cup. The presentation speech was made by Dr. E. A. Christian, superintendent of the Eastern Michigan Asylum, at Pontiac, in the presence of Dr. Burr's friends from various parts of the state who were present to do him honor. Five years ago he went to Flint to take charge of Oak Grove Sanitarium, previous to which time he had been for several years in charge of the Eastern Michigan Hospital, at Pontiac. Dr. Burr has a national reputation as an alienist.

DR. EDWARD J. ILL, of Newark, N. J., will read a paper on Indications for and the selection of operation for uterine myomata, before the gynecological section of the Buffalo Academy of Medicine, Tuesday evening, February 27, 1900. Dr. Ill is one of the most accomplished gynecological operators of the period, and a full attendance is anticipated on the occasion of his visit.

DR. CHARLES T. ST. JOHN, of Buffalo, as resigned as house-surgeon of Riverside Hospital to accept an appointment as Acting Assistant Surgeon U. S. Army. He has been ordered to proceed to the Philippines immediately by way of San Francisco.

DR. A. H. DOTY, health officer of the port of New York, paid Buffalo a short visit January 18, 1900. He called on Health Commissioner Wende and accompanied him to the garbage crematory in Cheektowatch.

waga. Dr. Doty is making himself familiar with Buffalo's system of disposing of its garbage. He took an afternoon train east after the inspection.

DR. THOMAS M. HEARD, JR., of 147 Lafayette Avenue, Buffalo, has been appointed house surgeon for the Riverside Hospital, vice Dr. St. John resigned. This appointment is a commendable one and we predict benefit to all interested as a result.

DR. O. C. SHAW, for many years a resident of Kennedy, Chautauqua County, has removed to Hamburg, N. Y. Dr. Shaw receives a warm welcome in Erie County where he is well known as a competent practitioner of medicine.

DR. B. C. LOVELAND, formerly of Clifton Springs, N. Y., has removed to Syracuse. He has established himself in the active practice of his profession at 608 South Salina Street, in that city.

OBITUARY.

DR. WILLIAM BUCKINGHAM CANFIELD, of Baltimore, Md., died at Roosevelt Hospital, New York, December 27, 1899, aged 42 years. The circumstances resulting in his death are extremely sad. He went to New York about a month before his decease apparently in good health. He fell to the pavement November 27th and became immediately unconscious. After removal to the hospital he improved somewhat, enough to recognise relatives who had been summoned, but relapsed and died on the day mentioned, of fracture of the skull.

Dr. Canfield was one of the most promising of the younger members of the Baltimore profession. He became known outside his city as an author and at the time of his death was editor of the *Maryland Medical Journal*. The news of this sad event was a great shock to his many friends, all of whom cherish for his memory the highest regard.

DR. E. R. AXTELL, of Denver, Col., died at his home December 14, 1899, of septic infection, following an autopsy, aged 33 years. He was editor of the *Colorado Medical Journal* at the time of his death

and besides occupied various hospital positions. He was a greatly respected member of the profession, as is amply attested by resolutions passed by his colleagues in the several societies and other bodies in which he had membership, in some which he had been an officer. The *Colorado Journal* was greatly improved during his editorship. The *Medical News* for January 20, 1900, makes posthumous publication of a paper by Dr. Axtell, entitled Diuretics in renal dropsy; their indications and uses—which is an interesting contribution to the subject.

DR. THOMAS JACKSON, U. of B., '71, of Whitehaven, Eng., died at his residence in that city, December 4, 1899, aged 65 years. Soon after graduation he returned to his native place and resumed the practice of medicine. He was at the time of his death the senior staff surgeon of the Whitehaven and West Cumberland Infirmary, manager of the Whitehaven Savings Bank, President of the Whitehaven Choral Union, and member of the Public Library and Technical Education Committee.

At the monthly committee meeting of the Whitehaven and West Cumberland Infirmary, held the day after his death, the following resolution was proposed by Mr. W. H. Kitchin (the chairman), seconded by Mr. J. Gunson, and supported by Dr. Muriel, Dr. Muir, and Dr. Welby I'Anson: "That the committee of the Whitehaven and West Cumberland Infirmary places on record its profound regret at the loss sustained by the institution through the death of the late Thomas Jackson, M. D., who for twenty-three years held the appointment of visiting surgeon, and who by his high moral principle and constant devotion to the duties of his office earned the sincere respect of all who were associated with him. The committee also desires to express its deep sympathy with Mrs. Jackson and her family in their great bereavement."

Dr. Jackson was uncle to Dr. William J. Falkner, of Youngstown, N. Y.

SIR JAMES PAGET, Bart., F. R. C. S., Eng., F. R. S., Sergeant-Surgeon to Her Majesty the Queen, and Consulting Surgeon to St. Bartholomew's Hospital, died in London, December 30, 1899, aged 85 years.

The life history of this great man is a most entertaining chapter in English medical annals. The story of his rise from obscurity in the little provincial town of Yarmouth, to renown in the great

metropolis of the world is full of absorbing interest. It furnishes a lesson of encouragement to every young man, no matter how humble his origin, if he is but willing to work.

In his life he furnished an example of industry, honesty, devotion to duty, courteous demeanor, sobriety, skill as a surgeon, eminence as a teacher, love of art, manliness, culture, all that goes to make a well-rounded character; in his death he leaves profound regret.

DR. JOHN CLARK CLEARY, U. of B., '98, of Port Chester, N. Y., died at his home January 14, 1900, of typhoid fever, aged 31 years. Dr. Cleary was a native of Clyde, N. Y., where he lived when he entered the University of Buffalo. He was a young man of promise, and his early death is deeply to be regretted.

DR. WILLIAM A HAMMOND, of Washington, D. C., Surgeon-General U. S. Army (retired), died at his home, January 6, 1900, aged 71 years. Dr. Hammond had a stormy career, especially during the Civil War period when he was Surgeon-General of the Army. He was dismissed from the service for alleged irregularities in medical contracts for supplies, but some years afterward he was reinstated after complete review of the case, when he was placed on the retired list. He made fame as an author and as a neurologist, rising from almost abject poverty after the war to wealth within the next twenty-five years. He subsequently became somewhat embarrassed, it is reported, but finally extracted himself, and lived a life of comparative ease in his later years. He was buried with military honors at Arlington National Cemetery.

SOCIETY MEETINGS.

THE Medical Society of the County of Erie at its seventy-ninth annual meeting, held January 9, 1900, presented a program of unusual merit. Besides the president's address on the water supply and disposal of sewage, comment upon which is made elsewhere, papers were presented by Dr. Chauncey P. Smith, on The importance of early diagnosis of tumors of the breast; by Dr. Maud J. Frye, on The neuroses of childhood; and by Dr. William G. Taylor, on Unusual condition of the skin and kidneys following an operation for appendicitis.

Dr. Smith demonstrated intimate knowledge of his subject, spoke extemporaneously and presented a large number of specimens of great interest, illustrating the several points that he accentuated—all of which made a good impression on his auditors.

Dr. Frye's paper was well written, and possessed the charm of much originality of thought, as well as ingenuity in form. The paper of Dr. Taylor was full of interest from the start, because of the novelty that attached to it, as well as the excellence of its manner of presentation.

This meeting demonstrates what can be done by well directed effort; it shows that this venerable society is full of youthful force; and it further serves notice on those who fail to attend its meetings that they, themselves, are the losers.

THE Niagara Falls Academy of Medicine held its last regular monthly meeting at the office of Dr. Frank Guillemont, 550 Main Street, Monday, January 8, 1900, at 8.45. Dr. Miller read a paper on the Obstetrical douche and the discussion was opened by Dr. Potter.

THE Medical Society of the State of New York is preparing to hold its ninety-fourth annual meeting just as this issue of the journal is being delivered to its subscribers. It is of the first importance that all the official delegates from Erie County shall attend this meeting in order to perfect their membership as their term will then expire, and new delegates will take their seats next year.

The most important feature of this meeting is perhaps, the discussion on tuberculosis, which is scheduled for Tuesday evening in the Assembly chamber. The following is the scheme of the debate:

State care of tuberculosis patients. (1) The duty of the state and municipality in the care of pulmonary tuberculosis among the poor, Edward O. Otis, Boston, Mass; (2) Remarks upon the work accomplished at the State Hospital for Consumptives, Rutland, Mass., Vincent Y. Bowditch, Boston, Mass; (3) Some results of the climatic and sanatorium treatment of tuberculosis in the Adirondacks, Edward R. Baldwin, Saranac Lake; (4) Infectious character of tuberculosis and the prognosis of incipient pulmonary consumption, George Blumer, Albany; (5) The policy of the state relative to the spread of tuberculosis, Enoch V. Stoddard, Rochester; (6) Legislation concerning tuberculosis: past, present and future, Hon. Horace White, Syracuse; (7) Taxation with relation to state care of consumptives,

Hon. Otto Kelsey, Geneseo; general discussion of these papers by John H. Pryor, Daniel Lewis, A. G. Root, S. B. Ward and others.

THE Buffalo Academy of Medicine held meetings during the month of January, 1900, as follows:

Section on Surgery.—Tuesday evening, January 2d. Program: Discussion on prophylaxis and treatment of urethral stricture, by Wm. H. Heath, Wm. C. Phelps, J. B. Stoner, S. Y. Howell, M. Hartwig and others.

Section on Ophthalmology.—Monday evening, January 8th. Program: Old facts and new theories concerning eye strain, Lucien Howe. First paper—Historical and elementary. A case of tuberculous tumor of the nasal septum was presented by J. C. Clemesha.

Section on Medicine.—Tuesday, January 9th. Program: Typhlitis and scolecitis, A. L. Benedict. The treatment of acute appendicitis, DeLancey Rochester.

Section on Pathology.—Tuesday, January 16th. Lawson Tait, Stephen Y. Howell. Remarks by William Warren Potter.

Section on Obstetrics.—Tuesday, January 23d. Program: Differential diagnosis of disease of the appendix and Fallopian tubes, Dr. C. C. Frederick. Eruptive diseases of the female genitals, Dr. J. Henry Dowd.

THE New York Physicians' Mutual Aid Association held its thirty-first annual meeting at the Academy of Medicine, 17 West 43d Street, Thursday, January 18, 1900, at 4 o'clock p. m. The following order of business was observed: Report of the trustees, election of officers. Action on proposed amendment to Section 1, Article IV., of the By-laws.

THE annual meeting of the New York Academy of Medicine, was held at the Academy, No. 17 West Forty-third Street, Thursday evening, January 4, 1900, at which Dr. Reginald H. Sayre, treasurer of the board of trustees, reported that the last item on the Academy's list of indebtedness had been paid, and that the organization begins the year free from debt, for the first time since the building of its home. Dr. Sayre said that the debt amounted to \$2,000, and was the last of the building indebtedness. The structure cost about

\$240,000. During the meeting the following new officers were installed. Vice-president, G. L. Peabody; trustee, Abraham Jacobi; treasurer of the board of trustees, Reginald H. Sayre, and treasurer of the Academy, H. L. Collyer.

At the conclusion of the business meeting the following papers were read: Pathology of migraine, Colman W. Cutler; Significance of migraine in Graves's disease, by the president, W. H. Thomson. The papers were then discussed by several of the members present.

THE Physicians' Club met at the home of Dr. J. Henry Dowd, 288 Franklin Street, Wednesday, January 10, 1900. The newly elected officers of the club were installed and an essay on Antiseptics in obstetrics was read by J. J. Walsh. The officers installed were: President, E. M. Dooley; vice-president, W. G. Ring; secretary, A. G. Bennett; council, Drs. J. J. Finerty, J. S. Porter, J. W. Nash, F. Boyle and C. E. Congdon.

THE Medico-Legal Society of New York, has issued a call for a tuberculosis congress to meet at Chicago in the latter part of February. A program is being prepared which will include papers from leading investigators and specialists, all bearing upon the modern treatment of tuberculosis. Among the phases of the question proposed for discussion is the construction and operation of special hospitals and sanatoria, the most successful methods of treating the disease, the importance of a change of climate and the advisability of using antitoxins.

THE National Pure Food and Drug Congress will hold its third annual meeting in Washington, D. C., at Columbia University lecture hall, beginning 12 m., Wednesday, March 7, 1900. The corresponding secretary is Alex. J. Wedderburn, Esq., National Hotel, Washington, D. C., who should be addressed for any information concerning the meeting.

COLLEGE AND HOSPITAL NOTES.

THE Buffalo Hospital of the Sisters of Charity has received through the Hon. Wilson S. Bissell \$7,000 bequeathed to that institution by the late George Howard Lewis. This early settlement of this

bequest was made at the request of Mrs. Lewis, in order that the hospital should receive the money during the holiday season, as it was Mr. Lewis's custom to remember it in the annual distribution of his Christmas charities.

ST. VINCENT'S HOSPITAL, New York, has received an electric ambulance, which was given by Edward Kelly, the son of Eugene Kelly, the banker, to which allusion was made in our October edition. The ambulance is ready for use and is equipped with windows in front and rear and can be made as warm and comfortable in cold weather as in the mild seasons. It is estimated that it can make easily ten miles an hour.

THE New York Post-Graduate Hospital has issued its fifteenth annual report, which is for the year ending October 1, 1899. This hospital furnishes unexcelled facilities for the study of disease to the matriculates of the Post-graduate Medical School, which is its primary object. It has a well-equipped laboratory for pathological, chemical and bacteriological study, and it also has a large dispensary where deserving poor are treated as out-patients. Connected with the institution are 112 physicians and surgeons who serve in the wards and teach in the school.

During the past year 523 practitioners of medicine from 57 states and countries have attended the school. There is a babies ward of 53 beds which are absolutely free, and are utilised for clinical instruction. An orthopedic ward is also attached, containing 16 free beds. Besides the usual wards for men and women there is a lying-in department connected with the out-patient branch. These women are served at any time, day or night, during the parturient period, often in homes of utter poverty and with squalid surroundings. A lying-in ward at the hospital is greatly needed and an appeal is made for that purpose.

A summary of the work of the hospital shows as follows: Number of patients treated in the hospital during the year, 2,668; number treated at the dispensary, 17,454; number of confinements attended by house physician, 368. Amount of money received from students' fees and certificates and given to the hospital, \$30,046.00. None of the physicians or surgeons receive a salary. The total cost of maintenance of the hospital was \$83,780.26; of babies' wards, \$14,479.97.

We glean these data from the report which is a model of exactness and detail, illustrated with numerous half-tone engravings, (among which is one of the Margaret Fahnestock Training School for Nurses, which is attached to the hospital,) and bespeaks of a noble work that is conducted on a large scale at a minimum of cost.

Book Reviews.

CARE AND TREATMENT OF EPILEPTICS. By WILLIAM PRYOR LETCHWORTH, LL. D., Ex-President of the New York State Board of Charities; Ex-President of the Eleventh National Conference of Charities and Correction; Author of *The Insane in Foreign Countries*, *Child of the State*, *Relief and Reform*, *Homes for Homeless Children*, etc. Illustrated. Octavo, pp. 246. New York and London: G. P. Putnam's Sons, The Knickerbocker Press. 1900.

Mr. Letchworth has long been known to this community as a scientific student of public institutions. His work on the care of the insane was a presentation of that subject as seen by him in Europe and America.

The care and treatment of epileptics is, first, a historical review of what public philanthropy has done in America and in Europe for this afflicted class. It is second, a plea for more and greater effort in the work of rescuing the epileptic from almshouses and homes for the feeble-minded; and third it is a descriptive work of every public institution in this country and of the more prominent ones in England and the continent.

The first state to act in behalf of epileptics was Ohio. In 1891 was laid the corner stone of the Ohio Asylum for epileptics and epileptic insane. In this colony, great attention has always been paid to diet, to education, to daily occupation and to amusements. In five years there were 1,295 patients, of these 81 were discharged cured.

The chapter on the Craig colony is naturally of great interest to us. Mr. Letchworth has given a most careful description of the buildings, the sanitary rules which have been adopted, and the general management of the various departments. No one can read this chapter without realising that the state of New York has most nobly met its obligation. Every one must feel that the board of managers has done its work most carefully and conscientiously.

The cottage plan and its advantages are set forth. The dietary is given in detail, as much stress is laid, and rightly so, upon the important rôle which this plays in the treatment of epilepsy. The advantages accruing to the epileptic from work adapted to individual needs, and from education are clearly pointed out. Facts and not theories are given.

We quote the following record respecting the first fifty patients admitted and their condition at the end of five months of colony life: Total number of seizures, first month, 708; fifth month, 315. Average individual seizures, first month, 14; fifth month, 6.

This to our mind represents what a proper environment can do for those epileptics who come from unfavorable surroundings.

Craig Colony is much too small to accommodate the needy and worthy epileptics of New York. Its present capacity is only 360. When the new group of buildings is completed it will only accommodate 620 patients, but it is a grand beginning and is certainly bound to be for all time a great and beneficent charity and an institution for scientific research.

Massachusetts, New Jersey and Texas have each provided institutions exclusively for epileptics. Other states have provided for epileptics and the feeble-minded in the same institutions. This, as Mr. Letchworth clearly shows, is not only an error, but is a position wrong to the epileptic. If this book does nothing else it must convince all students of this subject that the poor epileptics at any rate must be protected and cared for in specially conducted institutions. Their care must include medical, pedagogic and industrial work.

This book is most beautifully printed and illustrated. It is a strong argument for the establishment of such institutions as Craig Colony in every state in the Union. It is a splendid guide to those who would build and manage such institutions. Above all, it is a noble monument to the self-sacrificing, devoted author, who has given the greater portion of his life to relieving his less fortunate dependent brothers.

J. W. P.

PROGRESSIVE MEDICINE. Volume IV. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by HOBART AMORY HARE, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, handsomely bound in cloth, 398 pages, fifty-one engravings and five plates. Philadelphia and New York: Lea Brothers & Co.

This volume completes the first year of this useful digest. It will be found considering, first, diseases of the digestive tract and allied organs, the liver, pancreas and peritoneum, by Charles G. Stockton, of Buffalo. Second, genito-urinary diseases in the male, and syphilis, by William T. Belfield, of Chicago. Third, fractures, dislocations, amputations, surgery of the extremities, and orthopedics, by Joseph E. Bloodgood, of Baltimore. Fourth, diseases of the kidneys, by John Rose Bradford, of London. Fifth, physiology, by Albert P. Brubaker, of Philadelphia. Sixth, anatomy, by Frederic H. Gerrish, of Portland, Me. Seventh, hygiene by Henry B. Baker, of Lansing. Eighth, practical therapeutic referendums, by E. Q. Thornton, of Philadelphia.

It will be observed that these contributors are, for the most part, men well known in medicine, and, as therefore might be expected, these articles are the latest and best expressions of the art and

science of medicine and surgery up to the end of the year 1899, to which the volume takes us. We have heretofore expressed our opinion of "Progressive Medicine," hence need not repeat it here, except to say that as each volume has appeared, and especially in view of this last one, we are more and more strengthened in the belief that it is a great aid to the over-worked physician who must needs economise his time even to the moments.

COAKLEY ON THE NOSE AND THROAT. The Diagnosis and Treatment of Diseases of the Nose, Throat, Naso-Pharynx and Trachea. For the Use of Students and Practitioners. By CORNELIUS G. COAKLEY, M. D., Professor of Laryngology in the University and Bellevue Hospital Medical College, New York. In one handsome 12mo volume of 536 pages, with 92 engravings and 2 colored plates. Philadelphia and New York: Lea Brothers & Co. 1899.

Almost every branch of medicine is supplied with a manual. In this one a specialty, heretofore without literature of this order, is now provided. The book is intended for both students and practitioners, hence will undoubtedly fill the place to which we have referred and we may as well say right here that, in our opinion, it does it well.

The practical side of the subject is amply discussed, the chapters on diagnosis and treatment having received special attention at the author's hands. Chronic hypertrophic tonsillitis is well handled, which is a very important condition, and one that should be relieved before it leads to complications that may prove intractable. Diphtheria receives due consideration, which is another disease that admits of no delay in treatment. Disease of the maxillary sinus, sometimes so obscure, is receiving more attention of late by specialists, and we are pleased to see it so satisfactorily dealt with by Coakley. Tuberculosis of the larynx, too, a disease that must be recognised early in order to justify expectancy of cure, is well considered in this book. A considerable space is taken up with the subject of foreign bodies in the upper air tract, which is one of practical importance.

There are many other topics that deserve special mention in this book, but perhaps we have said enough to serve our purpose, which has been to accentuate the fact that this is one of the most satisfactory manuals that has recently come to our attention. It is well illustrated and all through the book are indications that it is the product of brain and hands that are familiar with the needs of the worker in the field that it deals with.

THE TREATMENT OF PELVIC INFLAMMATIONS THROUGH THE VAGINA. By WILLIAM H. PRYOR, M. D., Professor of Gynecology, New York Polyclinic; Consulting Surgeon, City (Charity) Hospital, etc. 12mo, pp. 248. With 110 illustrations. Philadelphia: W. B. Saunders. 1899.

This interesting monograph details the work of one of the most capable of the advocates of the vaginal route in preference to the abdominal, for most operations within the pelvic cavity. He gives

his reasons for this predilection with potency and records them in unmistakable English.

Beginning with endometritis, which is discussed under its several forms in about 35 pages, he proceeds to pelvic inflammation proper (9 pp.), salpingitis, under several heads (27 pp.), pelvic peritonitis (14 pp.), tubercular peritonitis (2 pp.), inflammatory diseases of the ovaries (8 pp.), broad ligament cyst (3 pp.), adherent retropositions (4 pp.), broad ligament abscess (2 pp.), diffuse pelvic suppuration (2 pp.), the anesthetic (1 pp.), curettage (10 pp.), exploratory vaginal section (10 pp.), conservative treatment (5), preparation of patient for a vaginal section (2 pp.), vaginal ablation (46 pp.) morcelation (6 pp.), vagino-abdominal hysterectomy in the puerperal state (4 pp.), accidents and complications (4 pp.), secondary hemorrhage (2 pp.), intravenous injection of normal salt solution (2 pp.), instruments (6 pp.), formulæ (1 pp.), sterilisation (3 pp.), index (8). There are several well-drawn illustrations in the book taken from life, and a number of others that are equally useful in explaining the author's method or ideas.

It is a book that will please the aggressive operator by the vaginal route and all who think with him that his way is the best.

A COMPEND OF THE PRACTICE OF MEDICINE. By DANIEL E. HUGHES, M. D., Chief Resident Physician Philadelphia Hospital; Physician-in-Chief Insane Department, Philadelphia Hospital, etc. Sixth Physicians' edition, thoroughly revised and enlarged, including a section on mental diseases and a very complete section on skin diseases. Philadelphia: P. Blakiston's Son & Co. 1899.

This excellent compend is again presented to the profession of medicine in a most attractive form. It is printed on excellent paper, with clear faced type, in gilt edges, with rounded corners and bound in flexible morocco.

The contents of the book, most of which is of the best material, is so arranged as to be readily accessible. It is, moreover, of convenient size for ready reference, has been prepared by a man who knows what busy physicians need and who has prepared for them just such a work.

It has been in popular demand too long to need more than a mere hint that a new edition is ready, to insure its purchase by those who desire to be fully equipped with the best. The price, \$2.25, is so reasonable as to bring it within the reach of the majority. We regard it as one of the most useful compends that is now in the market.

MINOR SURGERY AND BANDAGING. By HENRY R. WHARTON, M. D., Demonstrator of Surgery in the University of Pennsylvania. New (4th) edition. In one 12mo volume of 594 pages, with 502 engravings, many being photographic. Philadelphia and New York: Lea Brothers & Co.

The profession of medicine, as well as undergraduates are familiar with this manual. It has received the favorable judgment of teachers,

practitioners and students, since it was first published in 1891. At that time the JOURNAL gave it a detailed examination and expressed its opinion with considerable fulness. The succeeding editions have all kept pace with the progress of events, and this one is unusually satisfactory in that direction.

It is a book that exhibits the handiwork of the practical surgeon in all sections. In it, too, are described many little niceties in surgery, if we may so term them, that are rarely found elsewhere, which alone make the book of special value to the beginner in surgery, not to speak of its usefulness in that respect to his more advanced colleague.

A new section has been added detailing operative procedures on the cadaver, which will be found of interest especially in relation to the ligation of bloodvessels. The illustrations are excellent and the work deserves the full measure of success that it has attained.

A MANUAL OF DISEASES OF THE NERVOUS SYSTEM. By SIR W. R. GOWERS, M. D., F. R. C. P., F. R. S., Consulting Physician to University College Hospital; Physician to the National Hospital for the Paralysed and Epileptic, Queen Square. Third edition, revised and enlarged. Edited by Sir W. R. Gowers and James Taylor, M. A., M. D., F. R. C. P., Senior Assistant Physician to the National Hospital for the Paralysed and Epileptic, Queen Square; Physician to the Northeastern Hospital for Children and to the National Orthopedic Hospital. Vol. I., Diseases of the Nerves and Spinal Cord. With 192 illustrations. Octavo. Philadelphia: P. Blakiston's Sons & Co., 1012 Walnut Street. 1899.

This volume is a thoroughly revised and rewritten work. The newer terms in neurology have been adopted by the author to a slight extent.

The sections on anatomy and physiology of the spinal cord are most complete and painstaking and make a splendid foundation for the chapters on the diseases of the cord. In his description of diseases Gowers has always been most elaborate. Nothing is omitted; everything is given its full value. It is this characteristic, that has made the book such a favorite work of reference. It can never be a text-book, it is too large, too comprehensive. But it is so complete and so encyclopedic that no student of neurology can do without it.

The book is richly illustrated, many of the plates being new. We await with anticipated pleasure the appearance of the second volume, which will present brain and functional disease.

J. W. P.

BOOKS RECEIVED.

A Manual of Surgical Treatment. By W. Watson Cheyne, M. B., F. R. C. S., F. R. S., Professor of Surgery in King's College, London, Surgeon to King's College Hospital, etc., and F. F. Burghard, M. D. and M. S. (Lond.), F. R. C. S., Teacher of Practical Surgery in King's College, London, Surgeon

to King's College Hospital, etc. In six imperial 8vo volumes, with illustrations. Volume II, 382 pages with 141 illustrations. Cloth, \$4.00 net. Philadelphia and New York : Lea Brothers & Co. 1899.

Lea's Series of Pocket Text-Books. Histology and Pathology. By John B. Nichols, M. D., Demonstrator of Histology, Medical Department Columbian University, and F. P. Vale, M. D., Assistant in Pathology, Medical Department University of Georgetown, Washington, D. C. In one handsome 12mo. volume of 452 pages, with 213 illustrations. Cloth, \$1.75 net. Flexible red leather, \$2.25 net. Philadelphia and New York : Lea Brothers & Co.

A Text-Book of Diseases of Women. By Charles B. Penrose, M. D., Ph. D., Professor of Gynecology in the University of Pennsylvania ; Surgeon to the Gynceean Hospital, Philadelphia. Octavo, pp. 531. Illustrated. Third edition, revised. Philadelphia : W. B. Saunders, 925 Walnut street. 1900.

Chirurgie du Foie et des Voies Biliaires, par J. Pantaloni (de Marseille), avec 348 figures dans le texte. Octavo, pp. 626. Paris : Institute de Bibliographie Scientifique, 93 Boulevard Saint-Germain. 1899.

The Treatment of Diseases of the Nervous System. A Manual for Practitioners. By Joseph Collins, M. D. One volume, 8vo. Extra muslin, \$5 00 net. William Wood & Company.

Dudley's Gynecology. A Treatise on the Principles and Practice of Gynecology. By E. C. Dudley, A. M., M. D., Professor of Gynecology in the Northwestern University Medical School, Chicago. New (2d) edition. In one very handsome 8vo volume of 717 pages, with 453 engravings, of which 47 are in colors and 8 colored plates Just ready. Cloth, \$5 00 net ; leather, \$6.00 net.

The Principles and Practice of Modern Surgery. For the Use of Students and Practitioners of Medicine and Surgery. By John B. Roberts, M. D., Professor of Anatomy and Surgery in the Philadelphia Polyclinic ; Mütter Lecturer on Surgical Pathology of the College of Physicians of Philadelphia. New (2d) and revised edition. In one very handsome 8vo volume of 838 pages, with 474 engravings and 8 plates in colors and monochrome. Cloth, \$4.25 net ; leather, \$5 25 net.

Christian Science : An Exposition of Mrs. Eddy's Wonderful Discovery, Including its Legal Aspects. A Plea for Children and Other Helpless Sick. By William A. Purrington, Lecturer in the University and Bellevue Hospital Medical College, and in the New York College of Dentistry, upon Law in Relation to Medical Practice ; one of the authors of A System of Legal Medicine. New York : E. B. Treat & Company. 1900.

A Manual of the Practice of Medicine, Prepared Especially for Students. By A. A. Stevens, A. M., M. D., Professor of Pathology in the Woman's Medical College of Pennsylvania ; Lecturer on Terminology and Instructor in Physical Diagnosis in the University of Pennsylvania ; Physician to St. Agnes's Hospital and Out-patient Department of the Episcopal Hospital, etc. Fifth edition, revised and enlarged. Illustrated. Philadelphia : W. B. Saunders. 1898

General and Local Anesthesia. By Aimé Paul Heineck, M. D., Clinical Instructor in Genito-Urinary Diseases College of Physicians and Surgeons, Chicago ; Clinical Instructor in Gynecology, Chicago Clinical School ; Clinical Instructor in Surgery, Northwestern University Woman's Medical College. 124 pages, \$1.00. Chicago : G. P. Engelhard & Co., Publishers, 358-362 Dearborn street.

Recollections of a Rebel Surgeon and Other Sketches, or In the Doctor's Sappy Days. By F. E. Daniel, M. D. Illustrated. Austin, Texas : Von Boeckmann, Schultze & Co. 1899.

Children, Acid and Alkaline. "Health, the Golden Mean." The Law of Diet Selection, Contraria. The Therapeutic Law, Semilia. By Thomas C.

Duncan, M. D., Ph. D., LL. D., Professor of Medicine and Diseases of the Chest, Dunham Medical College; Consulting Physician to Chicago Foundling's Home, St. Anthony Hospital, Cook County Hospital, etc., etc. Philadelphia: Boericke & Tafel. 1900.

LITERARY NOTES.

THE *North Carolina Medical Journal*, now published at Charlotte, has been made a monthly, after being published semi-monthly for several years. This sterling magazine has, we think, made a wise change and we wish it continued success in its new form.

THE *Archives of Pediatrics* changed editors at the beginning of the present year. Dr. Floyd M. Crandall, who has ably conducted the magazine for some years, resigned, and Dr. Walter Lester Carr has succeeded him. The price of the *Archives* is reduced to \$2.00 a year.

THE *Maryland Medical Journal*, heretofore published as a weekly will hereafter appear monthly. We think the change a commendable one. The first monthly number, January, 1900, presents an excellent appearance, is well dressed and contains good material. The traditions of this staunch publication are well maintained in its new form.

THE *Providence Medical Journal* made its first appearance in January, 1900. It is edited and published by the Providence Medical Association and will appear once in each quarter year. It is announced that only original matter will be printed in it, that is to say it will contain no reprinted or abstracted material. It announces editorially that "it has nothing to sell and no favors to grant." The first number containing thirty-six pages makes an excellent appearance, and we wish the journal unbounded success on the lines it has marked out for itself.

THE American Medical Association offers an annual prize consisting of a gold medal, for meritorious scientific work. The commercial value of the medal is \$100, and is awarded by a committee of which Dr. G. M. Gould, of Philadelphia, is chairman. Competing essays must be in the hands of the committee on or before March 1, 1900.

THE *Iris* for 1900 is well under way. This publication by the undergraduates of the University of Buffalo is also a work of great interest to the alumni of the University. The committee in charge of editing and publishing it are desirous of securing the coöperation of the alumni. The price of this book is \$2.00, in advance, and will be ready for delivery March 1, 1900. Subscriptions should be sent to Beatrice A. Todd, class of 1900, Medical Department, University of Buffalo.

W. B. SAUNDERS, medical publisher, 925 Walnut Street, Philadelphia, announces that Saunders's American Year Book of Medicine and Surgery for 1900 will be issued in two volumes, instead of one as heretofore. One volume will be devoted to medicine and one to surgery, each will be complete in itself, and the work will be sold separately or in sets. Prices per volume, cloth, \$3.00 net; half morocco, \$3.75 net.

MESSRS. P. BLAKISTON'S SON & Co., of 1012 Walnut Street, Philadelphia, announce the publication of A treatise on human anatomy in its application to the practice of medicine and surgery, by John B. Deaver, M. D., surgeon-in-chief to the German Hospital, Philadelphia, formerly assistant professor of applied anatomy in the University of Pennsylvania. The work will consist of three royal octavo volumes, 450 full page plates. Handsome cloth, \$21.00; full sheep, \$24.00; half green morocco marbled edges, \$24.00; half russia, gilt, marbled edges, \$27.00 net. Volume I. now ready; 152 full page plates. Regions considered: Upper extremity, back of neck, shoulder and trunk, cranium, scalp, face.

This volume has been published and the first printing for the most part sold. Both in its text and illustrations it has equaled every expectation. The purpose to publish a work which makes the study of applied anatomy easy, interesting and of great usefulness to the practising physician and surgeon has been unquestionably attained.

The second volume is now on press and will be published in February, 1900. The regions described are: Neck, mouth, pharynx, larynx, nose, orbit, eyeball, organ of hearing, brain, male perineum, female perineum.

The third volume is in preparation and nearly ready for press. The regions described are: Abdominal wall, abdominal cavity, pelvic cavity, chest, lower extremity, and will include about 150 full page plates.

MESSRS. LEA BROTHERS & Co., of Philadelphia, announce that the volumes of Series of Pocket-text Books will hereafter be bound in red cloth, heavy beveled edge boards, and also in flexible red leather with round corners and with margins trimmed to facilitate carrying in the pocket. The leather bound books will cost 50 cents more than the cloth bound.

MESSRS. E. B. TREAT & Co., medical publishers, New York, announce that the 1900 edition of the International Medical Annual, will soon be issued. They also say that never before has there been connected with the issuance of the Annual, as editors and contributors, such an array of distinguished authorities in the various departments of medicine and surgery.

They further confidently assure their patrons and friends that the 1900 Medical Annual will be better by far than its predecessors; and that it will come as in previous years (to use the words of the *New York Medical Record*) "as an annual treat, covering the advances in the several departments of medical science."

MISCELLANY.

PROPOSED INVESTIGATION OF THE NATIVE DRUG PLANTS OF THE UNITED STATES.—The secretary of agriculture, Hon. James Wilson, has embraced the following paragraph in his annual report, which, in more particulars than one, is of interest to the medical profession :

The collection of native drug plants in the United States, considered from a purely financial standpoint, aside from medical and humanitarian aspects, involves the expenditure of millions of dollars annually. The commercial extermination of some of the most useful species is already threatened, and doubtless others would be found in the same conditions were the facts known. The price of one native plant, gingseng, our exports of which average more than a million dollars annually, has more than quadrupled in the past thirty years, so that its cultivation, as urged four years ago by this department, has now become profitable. It is clear from this and many similar cases that the native drug industry is capable of either decline or improvement, according to the way in which we handle it.

The Pan-American Medical Congress has recently submitted to me a proposition to coöperate with this department in a technical and statistical investigation and classification of our native drug plants. By accepting this proposal we shall secure, in a research of which we have long felt the need, the cordial assistance and support of an

influential association of learned physicians; we shall encourage each of the other American nations, all of which are represented in the Pan-American Medical Congress, to proceed with a similar investigation of their own medical flora; we shall furnish a basis for the remunerative employment of much land and many people, and we shall stimulate the great growth and growing trade in drugs between the countries of North America and South America. I urge the appropriation of \$10,000 to enable this department to coöperate in this investigation.

We commend this subject to our readers, and especially to teachers of therapeutics and materia medica. It is also a timely topic to engage the attention of the congress for the revision of the pharmacopeia, which will meet in May, 1900.

WILLIAM CARPENTER, of 1260 Fillmore Avenue, Buffalo, was arraigned in Justice Murphy's court, January 12, 1900, on the charge of illegally practising medicine. Dr. John B. Coakley, chairman of the board of censors, made the complaint on behalf of the Medical Society of the County of Erie. He alleged that the defendant advertised that he had for sale certain remedies which were positive cures for specific ailments, and he further claimed that Carpenter had treated several applicants and had accepted payment for his advice. Justice Murphy held Carpenter for the grand jury.

SUPERINTENDENT O'ROURKE of Bellevue Hospital, New York, says *The Tribune* received a letter recently from Detroit, in which the writer says he wishes to sell a physician's diploma for \$500 to save the owner and his family from being driven from their home. He says the diploma is one of the New York University Medical College of six or seven years ago and that he consents to sell it, a thing he would not countenance under ordinary circumstances. The offense is punishable in this state by a fine of not more than \$250 or imprisonment for six months for the first offense, and on conviction of any subsequent offense by a fine of not more than \$500, or imprisonment for not less than one year, or both.

GOVERNOR CANDLER, of Georgia, is entitled to the thanks of the members of the medical profession throughout the country for vetoing the osteopathy bill passed by the legislature. He disposed of the measure with a few business-like words, and thus saved the medical profession of the empire state of the South from disgrace.

MESSRS. SCOTT & BOWNE, manufacturing chemists of New York, have placed us under obligation for one of their desk calendars for 1900. This is a renewed courtesy; last year we received one for 1899. The convenience of such an article is very great, and no desk can be regarded as complete without one. We appreciate the courtesy of this famous house. The calendar may be obtained on application to Scott and Bowne, 409-415 Pearl Street, New York.

BUFFALO MEDICAL JOURNAL.

VOL. XXXIX.—LV.

MARCH, 1900.

No. 8.

Original Communications.

AGAIN THE QUESTION OF CANCER.¹

By ROSWELL PARK, A.M., M.D., Buffalo, N. Y.

Professor of Surgery, Medical Department University of Buffalo.

IF ONE may rely upon medical journals both at home and abroad as fair indices, the problem which both most perplexes and interests the medical world today is still that of cancer. This must be my excuse for again bringing this subject before you. No better proof of this can be given than the timely appearance of the "Cancer Number" of the *London Practitioner*, for April of last year, which aroused the greatest interest all over the world. A year ago I read before this society a paper on the same subject, in which, among other things, I dealt with figures and statistics.

To go minutely into this subject requires that kind of study of figures and of maps which can only be satisfactorily given at the desk, and it is not my purpose today to carry you into intricacies of this kind. I am perfectly willing, however, to reiterate the essential conclusion which I have repeatedly uttered and published—namely, that cancer as a disease is certainly upon the increase, and that the matter of its *rate* of increase is subsidiary to this principal fact.

When voicing this opinion, as I often have to, I have been frequently asked, Is not this to be accounted for by improvement in diagnosis? And some are so sure that the answer to this should be affirmative that they dismiss the whole question with that satisfactory, self-given answer. Such reasoning is, however, fallacious. It is true that improved methods of diagnosis prevail and the disease is now recognised as formerly it was not. It is also true that certain

1. Part of a paper read before the Medical Society of the State of New York, at Albany, January 31, 1900.

lesions formerly considered cancer are not so now; actinomycosis, for instance, and other of the infectious granulomata. This, to be sure, will exclude only a certain small percentage of cases. But one feature of this matter I have never yet seen alluded to in print, and that is that just in proportion as diagnostic methods are improved and operations attempted earlier, just in that proportion do we get actual cures and save these patients from dying of the disease. If, therefore, such improvements be regarded as they should be, it will appear that mortality rates are being actually reduced as compared with the real number of cases. To me this really means a great deal, and I do not hesitate to say that it should be a matter of pride with the surgical profession that they may be able to reduce the death-rate, while, nevertheless, the disease rate is slowly creeping up. More important, then, than to study the deaths is to note the number of actual cases of cancer occurring, and I believe that the experience of every surgeon living will tally with my own in this regard.

A most cogent plea for collective investigation of cancer has been recently published by Katz, of Hamburg (*Deutsche Med. Woch.*, 1899, Nos. 16, 17.) He calls attention to the unsatisfactory explanation afforded by many of the theories now in vogue, and argues logically and convincingly in favor of the method by concerted investigation, and particularly the statistical method. It was Mars d'Espine who perhaps set us our first example in the direction of statistical study, when he reported the statistics for thirteen years in the Canton of Geneva, a careful study which has not yet found a sufficient number of imitators. The special interest of Katz's paper at present for us, is the corroboration which his own studies afforded of the statement which I have so frequently made, that there is every reason to think that cancer, as a disease, is upon the increase. Katz shows, for instance, from a study of Hamburg conditions, the experience of private practice and the mortuary as well as pathological statistics of the General Hospital there, as well as by the studies of E. Fraenkel, that in that city, for example, there is a well-marked increase in the percentage of cancer. Moreover, this statement is accentuated by statistics from all over the world, which seem to show that not only is the disease upon the increase, but that the age of liability is becoming younger, and that it is rather the better classes of people than the lower in whom it seems to predominate. Katz concludes his paper by a recognition of the difficulty of collective investigation, and at the same time by a statement that it is of the greatest importance that it should be undertaken.

A topographical study of the disease will render great aid in solving some of its mysteries. As classical models for such study we may refer to Power's paper on The Local Distribution of Cancer and Cancer Houses, in the April, 1899, number of the *Practitioner*, the studies contained in the *British Medical Journal* before July 1, 1899, with the editorial comments thereon, and the paper by Lloyd Jones, on The Topographical Distribution of Cancer, in the *British Medical Journal*, for April 1, 1899.

What could be more accurate, in such work, than Jones's method, which he describes as follows:

Having obtained the list of houses in which persons had been taken ill with cancer, I proceeded to visit the houses and to mark each one on an ordnance map—scale of ten feet to a mile—showing the affected and the non-affected houses in red and black respectively. This map of the borough showed at once that certain districts were fairly free from cancer, while other regions were far more extensively affected. The areas most affected of all showed 1 case in every 2 to 5 houses; the most healthy areas, from this point of view, showed only 1 case (or no case) in every 60 houses.

The figures obtained were as follows:

Total number of houses concerned, 5,685; unaffected houses, 5,247; affected houses, 438. Showing a mean of 1 affected house to every 11.9 unaffected houses. Multiple cases in the same house divisible into: (1) Double cases, 7; (2) triple cases, 3.

But as showing what can be accomplished in rural districts in this same line of work, if only the necessary zeal and intelligence be applied to it, take the following illustration furnished me by Dr. John E. Sutton, of Albion, Orleans County. He writes me:

During the last five years, or so, there have occurred from all causes, within a range of one and one-eighth miles of a small hamlet near Albion, N.Y., (Rich's Corners) 16 deaths. Of these 9 were unquestionably from cancer; 2 were probably caused by cancer, judging from the history of the cases as learned from the friends. Of the remaining 5 one died of a pistol-shot wound, leaving 4 of the 16 as dying of disease other than cancer. There are at present 2 cases in the territory mentioned; one of them I operated upon a year ago, without recurrence as yet; the other is beyond help.

This letter is accompanied by a drawing which makes plainer yet the facts therein stated.

I wish that this report of Dr. Sutton's might stimulate many others to similar study and report.

Durante and Cohnheim believe that tumors proceed from embryonal remains; Thiersch taught a lessened resistance of connective tissue to epithelial encroachment; Hansemann and Hauser hold to an altered cell condition which they speak of as *anaplasty*, while Fabre-Domergue also believes in certain vague cell changes or cytotropic alterations, and Ribbert regards tumor formation as unwonted cell activity and the escape of certain cell groups through proliferating connective tissue. All these statements, however, seem to be rather descriptions of certain facts observed at various times, and they still leave the real question of *why* these cells act as they do quite untouched.

It seems quite fair to assume that as a preliminary to cancer formation we must assume a certain *predisposition* of tissues, which may be general or local, inherited or acquired. This is no more than we fully believe to obtain in other diseases to which cancer shows more or less analogy. We see what local predisposition may do under conditions of chronic irritation where we have cancer following chronic eczema, catarrh, ulcers, scar formation, or gall-stone, diseased teeth, mucous patches or other syphilitic lesions, or the presence of such foreign bodies as clay pipes, soot, paraffin and the like. It is, indeed, now a question whether such chemical irritants as enzymes may not contribute to cancer formation.

Again, in the way of local predisposition we see that nearly all cases of skin cancer occur on exposed parts of the body, face, hands, genitals or nipples; and when on other parts almost invariably on surfaces where there has been some lesion as warts, eczema, sebaceous tumors, ulcers or scars. The only exception to this general statement is the hairy scalp, and yet this may be regarded as in a sense a well protected surface.

Cancer of the tongue is also found almost solely in men, because smoking, bad teeth and syphilis of the mouth mostly prevail in the male sex. Cancer of the ear begins nearly always on the upper and outer border, *i.e.*, the least resisting and most often irritated part, as by injury, frost-bite, etc., or else in those recesses which are hardest to clean. Cancer of the upper alimentary tract occurs by far most often at the sight of previous lesions or irritations, *i.e.*, scars, fissures, etc. In the stomach and bowels we know that they are often preceded by ulcers. After food has been in one sense sterilised by gastric juice, bile and pancreatic fluid, it seldom carries cancer germs, and primary cancer of the small intestine is a great rarity. In the ileo-cecal region and the colon it becomes com-

mon again, and here it is especially that stagnation of the fecal current permits it.

Particularly about the breast and nipple, where chronic mastitis, subinvolution, and ulcers or fissures furnish the local predisposition, do we meet with cancer. Here, also, inherited cell proclivities may play a large rôle. But to external influences must be assigned the major rôle, as well as to such lesions as eczema, or intertrigo of overhanging mammæ, or the pressure of corsets.

So, too, with cancer of the uterus. Chronic tissue changes furnish the site for most of these lesions, and especially scar tissue, ectropion of mucosa, etc., while cancer of the endometrium is apparently inseparable from catarrhal lesions, placental relics or diseases. Even submucous myomata are accused of giving rise to cancer.

The apparently prophylactic effect of circumcision is well known, since Jews relatively seldom get syphilis or cancer of the penis, but gonorrhea often.

Cancer of the duct glands is relatively common as compared with those of the so-called ductless glands, which latter suffer much oftener from endothelioma and angeio-sarcoma.

Summarised, carcinoma takes its origin almost always at those places where chronic tissue alterations or scars have caused local changes which we may fairly regard as constituting a predisposition, or where retention of secretion or contents have produced the same effect. While all this cannot be said for sarcoma, certain other features stand out predominantly, which are equally significant.

It is evidently manifestly impossible to draw any sharp distinction between the true tumors and numerous other infectious lesions, whose parasitic origin is not now denied. We must, moreover, never lose sight of the analogies offered from the vegetable kingdom, where practically all xylomata or tree-cancers (many of which are fatal to the trees) are due to invasion of parasites either before or after traumatism of some kind, even such as frost and ice may produce.

We must remember that sarcoma of bone, like osteomyelitis, may be apparently produced after injury or exposure, and we can then view it only as the expression of the localised action of some parasite circulating with the blood, and setting up disturbance at the point of least resistance.

Autoinfection with cancer is by no means so rare. Implantation cancer of one labium from the other is not uncommon, and the vagina is not infrequently infected from the os. When colloid, abdominal

and ovarian cancers were more frequently tapped than now, implantation along the trocar tract was frequently seen. How often we see secondary cancer along the line of incision made for removal of the primary lesion, infected at the time.

Instances must be known to many of you, as they certainly are to me, of various members of the same family, in one house, succumbing one after another to cancer. I have elsewhere called attention to Behla's remarkable study of endemic cancer in the little town of Lückau.

There is no doubt but that many fungi can produce certain enzymes which have the power of exciting both cell proliferation and degeneration. So, too, Bejerinck, for example, has found that the juice pressed out from the larvæ of those insects which produce galls in trees has the same power of exciting proliferation of plant cells as have the larvæ themselves (Eckstein, Pflanzenzellen und Gallentiere, Leipzig, 1891.)

Czerny and others have recently again raised the question as to the possibility of spontaneous retrocession of malignant tumors. This is a rare phenomenon in which I thoroughly believe, and to which I propose at some later time to devote special time and study. At present I am anxious to obtain data of carefully observed cases, and solicit your aid in securing them. Believing in it, as I am compelled to do, there comes up at once the query, how many cases of improvement after employment of erysipelas toxins or after exploratory operations may be due to it alone?

(The essayist then presented a list occupying several pages of reported cases of cancer occurring at precociously early ages.)

It is never possible to get away from that question of fundamental importance—What is the cause of cancer? Realising the futility of purely personal effort in the solution of so large a problem, legislative aid was invited and finally secured. By means of this a laboratory has been well equipped and manned for the purpose. This laboratory has been organised in order to study all the problem includes, and in the broadest possible way. It is not committed to any particular view nor based upon a single idea. As the originator of that laboratory I wish to emphasise that my own papers on the subject, including this one, are not to be considered as anything more than my own personal views, save when so specified. When Dr. Gaylord thinks the time has come to publish the results of his investigations, and those of his co-laborers, then we may be said—as an institution—to stand committed to whatever views are at that time

expressed. For myself, I have not hesitated to espouse the parasitic theory, for many years, and can only see in the labors of others, including those of my colleagues in the State Laboratory, constantly increasing confirmation of my beliefs. Yet these views are as largely the result of clinical as of pathological study.

Malignant tumors certainly constitute a morbid group which may be regarded as having strong family resemblances, and yet it is quite impossible to suppose that if of parasitic origin a single parasite should be at fault. One cannot imagine that epithelioma of the lip and sarcoma of bone marrow are necessarily due to the same parasite. Here again, as so many times, we find a strong analogy between cancer and the infectious diseases. Suppuration, for instance, we know may be produced by any one of numerous organisms. We acknowledge its parasitic explanation, while at the same time appreciating this fact. I want it to be emphasized that in all my own writings upon this subject I have never for a moment declared all forms of cancer to be due to a single parasite, but believe that there are numerous organisms which may produce this condition under favorable circumstances. If this be correct, we must first establish the general nature of the process and later try to identify the organism at fault.

When the State of New York by appropriation established a laboratory for the investigation of cancer it devolved upon those who had charge of the work to elaborate a rational plan by which the subject could be properly approached. Necessarily, the first steps in such an investigation had to be taken along conventional lines, and so extensive and yet scattered has been the work of various investigators of the subject, that it has required a considerable period of time and no small amount of effort to thoroughly collect and classify the material at hand. It was decided in the beginning that the subject must be as much as possible approached from all sides, but the limitations of our appropriation have thus far rendered it only possible to carry out an elaborate pathological and bacteriological research. From the beginning the plan has been to add to these two sides of the question a complete and full investigation along chemical lines. Aside from the fact that our present quarters and appropriation have thus far not permitted our undertaking this third branch, the proper man was not apparent, and it is only within a few months that such a scientist has been obtainable. In making to you a short report of the amount of work which has been accomplished, I wish to particularly emphasize that much of the work which may

at first glance not appear of great importance has been none the less necessary, and has required as great care and precision as work which we are at present conducting and which gives promise of much that is positive. We may say in reviewing this portion of the work that our early efforts showed us that, while all of the various appearances described could be found in certain specimens, no method gave us constant results. Likewise, we have been able to determine to our own satisfaction that histological investigation alone will never determine the nature of certain suspicious bodies which are to be found in carcinoma. As I stated before this meeting a year ago, examination of fresh tumors gave us more encouraging results, and we were able to determine the presence in all carcinomata of certain bodies resembling fat, but which could not be dissolved in ether or other fat solvents. Various attempts to harden and stain these bodies had met with only partial success when we came into possession of an article, published by H. G. Plimmer, in the Cancer number of the *Practitioner*. Plimmer has investigated during a period of six years over 1,100 carcinomata, and by a special staining method which in principal consists in using a fat fixative, osmic acid, removing the same by oxidation with hydrogen peroxide, and staining with special reagents, has succeeded in demonstrating the presence in practically all carcinomata of certain characteristic bodies which we are now able to say are identical with those which had been observed by Dr. Gaylord in the fresh state. Plimmer's method furnishes further corroboration of the exceeding close resemblance which these bodies in the fresh state bear to fat, and it is probable that the success of his methods depends upon the fixation of fat-like substances which these bodies contain. Since employing Plimmer's method, Dr. Gaylord has been able to demonstrate in all carcinomata examined the characteristic appearances described by Plimmer. In many cases these bodies are very few in number and only prolonged search will disclose them. Plimmer reports some success in the cultivation of these organisms, and although we have as yet been unable to obtain the organisms by culture, we are at present working upon an indirect method by which we hope we shall ultimately succeed in isolating the organisms in all cases where present.

Our most recent work, by which we are introducing tumors into animals, employing another method, has resulted in the discovery of the fact that by the employment of proper staining methods the parasites found in cancer may be detected in large quantity in the

enlarged lymph nodes of the experimental animal. This work is still in progress, and we are not prepared yet to publish it in full; but I wish merely to indicate to you the fact that even slight variation in technique may give totally negative or exceedingly positive results. In one case Dr. Gaylord succeeded in producing a true adenocarcinoma in an animal, by inoculation with fluid from the peritoneal cavity of a man suffering from colloid carcinoma of the omentum.

In this fluid was observed the presence of an organism which apparently belongs in the yeast group, and which we were unable to cultivate. The organism in the original fluid was injected into the jugular vein of a guinea-pig and after three weeks and a half the animal was killed; whereupon, minute nodes of beginning adenocarcinoma of the lung were found. This is the first positive case of this kind, and holds out to us the definite hope that when we are able to understand the nature of these organisms we may be able to produce carcinoma in animals with organisms obtained from carcinoma in man. The laboratory is in possession of pathogenic yeasts which various investigators, Sanfelice, Plimmer and others, have isolated from cancer, and we are now carrying on an elaborate investigation in the first steps of which we have been able to confirm all that Plimmer has published. The principal difficulty which we encounter at present is an entire lack of required knowledge, on the part even of botanists, of the nature of the organisms in question. These organisms are exceedingly polymorphic, and it requires prolonged experimentation to determine the relation between certain definite bodies found in the tissue, which are presumably these organisms, and the appearance of the same organisms when grown upon artificial culture media. In this direction our recent experiments are rendering us great aid, and we have been able to confirm the identity of the bodies described by Plimmer and observed by ourselves in the fresh state, with the organisms which Plimmer has been able to cultivate. In his examination of 1,100 tumors Plimmer has been able only in five cases to obtain a culture of the organism upon artificial culture media, indicating that the cultivatability of the organism is exceedingly variable. Therefore, the large number of cases in which we have obtained negative results indicates nothing more than the fruitlessness of attempting to study organisms of unknown habitat by conventional methods. There are certain indications that the various forms of tumor are not produced by one organism, or even necessarily by one class of organisms. This fact I brought prominently before you a year ago and today I am able to give you definite confirmation

of the same, in that from one pigmented tumor we have obtained a pure culture of an unknown fungus, which under certain conditions produces a pigment identical in appearance with the pigment found in the tumor. We have likewise been able by special methods to stain the elements of the organism in the tumor. The experimental portion of our work we are not yet prepared to report upon.

In this work we have endeavored—and have succeeded to a limited extent—to arouse the interest and coöperation of the veterinarians who come into contact with a large amount of interesting material. To the personal interest of Drs. Wende and Zinc, of Buffalo, for instance, we are indebted for some very interesting specimens from animals. Such as these we are always anxious to secure, and consequently, I would appeal through you to them, so far as you have it in your power to spread this request for coöperation.

510 DELAWARE AVENUE.

WATER SUPPLY AND SEWERAGE PROBLEM OF BUFFALO.¹

By J. B. COAKLEY, M. D., Buffalo, N. Y.

IN OCTOBER, 1893, the Board of Councilmen appointed a committee consisting of Councilmen Hanrahan, Sandrock and myself to investigate the desirability of constructing a sewer in Tift Street, and to ascertain whether Buffalo River, Niagara River and other waterways were being contaminated with sewage. The committee conferred with at least half a dozen city officials, who were in office at that time, and a verbal report was made to the board, which protested against sewerage into sluggish waterways within the city limits, which have outlets into Niagara River, and especially against sewerage into Buffalo River. But we failed in our efforts to make the city officials realise that there was any real danger to the water supply, for they insisted that the entire contents of Buffalo River were drained into Black Rock harbor and did not reach Niagara River. Nevertheless in February and March of the following year (1894) there was an outbreak of typhoid fever, and the officials were compelled to admit that the contamination of the water supply was due to water drawn from the Niagara River near the American shore, known as the Bird Island intake.

1. President's address at the seventy-ninth Annual Meeting of the Medical Society of the County of Erie, January 9, 1900.

In April, 1895, a committee of the Board of Aldermen reported on the water supply of the city. The report consists of a statement of the conditions existing at the time, and of certain recommendations. The latter were, briefly, as follows:

First—To enlarge the tunnel.

Second—To construct a second tunnel parallel to the existing tunnel.

Third.—To extend the old tunnel from the Bird Island Pier out into the river to clear water, by means of a pipe laid in an excavation cut in the rock.

Fourth—To obtain a new 30,000,000 gallon engine to be placed at the lower pumping station, and also four new boilers to pump direct into the new reservoir, and to have the three existing Worthington engines rebuilt.

The committee reported that "prompt action was necessary to protect the City from a great catastrophe—either in the shape of a famine or an accident to the plant which is absolutely unprotected." An explosion at the pumping station would probably destroy the entire apparatus and the city would be without water. A fire at the pumping station would bring about the same dire result. "The danger," said the committee, "is too great to be ignored, the responsibility too grave to be lightly passed over." In December, 1895, Asst.-Supt. Knapp made a report to the board of Public Works upon pumping plans, and upon the location of the new tunnel and intake. And in October, 1896, Mr. Rudolph Hering, of New York, an expert engineer, made a lengthy report, in which he put forward very much the same recommendations as Asst.-Supt. Knapp. These reports were published in the newspapers at the time and are too long for reproduction here.

In the spring of last year I happened to look out of a window on an upper floor of the Prudential Building. The rainfall having been heavy, Buffalo River was very full, and there being strong southeasterly winds, it was swept out into Niagara River to a very considerable extent. The line of demarkation was easily apparent in consequence of the difference in color between the water of Buffalo River and that of the lake. Being strongly impressed with the belief that the contents of the former reached the inlet pier—the place at which our drinking water is obtained—I went to the office of the Mayor to request him to look at the spot where Buffalo River joins Niagara River from some high building before the effects of the heavy rainfall and the wind had disappeared. His Honor was away from the city,

but I mentioned the facts to his secretary, Mr. Fleming, and also to our health officer, Dr. Wende, both of whom afterward told me that they had observed the same condition of the water. On March 30, 1896, Engineer Knapp noticed that the roily water of Buffalo River reached a point 20 or 30 feet west of the inlet pier in the Niagara River, and it continued to do so for four hours. Engineer Knapp put this incident on his record at the time. The probability is that proof of Buffalo River water entering Niagara River can be obtained at any time after heavy rains. The time for action has arrived. Everything, including the land and the legislation necessary to acquire title to the same, is now in such condition that the Council can order the tunnel, the extension and the excavation commenced without unnecessary delay. The total cost of the work has been estimated at about \$500,000, and while this may seem a large sum, we must remember that good water will contribute more to the health and happiness of the human race than any other single article that can be mentioned. Water is the best and cheapest of all medicines and in spending money to obtain a satisfactory supply we shall, I feel sure, contribute to the general prosperity of this city. All other improvements can better afford to wait than this one, for, apart from hygienic reasons any defect in the quantity or the quality of the water during the Pan-American Exposition would give Buffalo an unenevitable notoriety for many years to come.

Buffalo appears to require (including a large quantity wasted) about 100,000,000 gallons of water every twenty-four hours, and I know of no process by which the consumption can be reduced, without injury to the community. As it is, few people drink enough water, and nobody, outside our own profession, does too much bathing. Now, a few words about filtration. I ask you to bear in mind that the filtration of water for Buffalo is a very different matter from the filtration of water for European cities. While few of the latter use more than twenty-five gallons per day per head of population, New York uses sixty and Philadelphia ninety gallons per day. The cost of filtering the whole of the water for our city, including the interest upon the investment, has been estimated by Mr. Rudolph Hering at not less than \$6 per 1,000,000 gallons. It would seem as though filtered water is misused when applied to such purposes as to lay dust, to generate steam and to flush sewers, for all these processes lead to repollution, without any benefit whatever. A duplicate supply, one for domestic and the other for public purposes, would be a great advantage; but I am afraid that such a plan is outside the

range of practical politics at present. As to filters: The American or mechanical system of filtration is more rapid than the European method. The former consists of the formation of an inorganic slime upon the small grains of sand. This is created by adding to the water, as it goes into the filter, something less than one grain of alum to each gallon of water. The lime in the water decomposes this alum, forming an aluminum hydrate, which settles upon the sand at the bottom of the filtering bed. The cost of this form of filter is about \$70,000 per acre, which ought to produce more than 2,000,000 gallons of wholesome water every twenty-four hours. A filtering plant requires constant attention and cleaning, the cleansing process consisting of "reversing the flow of water until the flow is clear."

Permit me to point out that one of the most satisfactory results of patient scientific investigation is that public opinion is aroused, and puts itself in evidence by the enactment of city ordinances and the passage of statutes by the state. How long it will be before we impress the laity with the absolute necessity of improving the quality of the water I cannot say, but we have now succeeded, I believe, in making it generally understood that typhoid fever is, in the great majority of cases, due to contaminated drinking water. The bacillus typhosus is probably the greatest disease-producing microorganism in human excrement, the extent of its vitality is known with moderate accuracy, and extremes of cold do not deprive it of its pathogenic power. If favored by a current in the lake of from two to four miles an hour, it might travel from one end of Lake Erie to the other, eventually reaching Buffalo in full possession of all its death-dealing qualities.

The idea that water is purified by the oxidation of organic matter as a result of the direct action of atmospheric oxygen, is a fallacy of a wide-spread character. The experiments of Profs. Leeds and Mason, and the practical experience of Newburyport, Mass., in 1893, have shown the error of this doctrine so conclusively that, in a paper upon The relation of impure water to disease—published in 1897, Dr. Carpenter, assistant bacteriologist of this city, said: "The adage, 'No river is long enough to purify itself' would seem to have been about proved."

A very small amount of consideration would lead one to the conclusion that concerted action upon the part of Buffalo, Erie, Cleveland and Detroit would result in some measures being adopted which would materially reduce the amount of refuse, garbage, etc., thrown into the lake; but this suggestion was made half a dozen

years ago, and has been repeated many times without anything being done, apparently because no body is willing to take the initiative. That being so, the question before us is, What means can be employed by the City of Buffalo, without extraneous aid, to improve the condition of its water? The Health Department is doing all that can be done in the way of chemical and bacteriological examinations. I am under an obligation to this department and also to the Department of Public Works for a considerable part of the information I am able to place before you, and I wish to express my sincere thanks to the gentlemen in both departments who have so kindly given me their valuable assistance. Without their aid, this paper would have contained only a modicum of facts.

Drinking water, to be fit for human consumption, ought to be free from pathogenic microorganisms, and it ought also to be in accordance with a well-known chemical standard; it need not, of course, be absolutely pure, but, on the contrary, it should contain a small quantity of mineral salts in solution, as well as gases in solution, and water-purifying organisms. It is obvious, I need hardly say, that water may be in good condition, as far as chemical analysis will show, may yet be unfit for drinking purposes by reason of the presence of pathogenic organisms. It is generally admitted, I assume, that whenever the opinions of the chemist and the bacteriologist differ as to the quality of the water, the public should boil it before drinking it. A statement of the technical methods by which water is shown to be potable or unfit for drinking purposes would be out of place here, even if the time were at my disposal. I propose to say a few words as to the condition of the water at various points; but before doing so, I beg leave to place before you the desiderata of a satisfactory water supply, as laid down by Dr. William C. Krauss, of this city, at a meeting of the American Microscopical Society in 1896.

"First—The water supply should not in any possible way be liable to pollution or contamination from the sewage of any other community.

Second—The sewage should not be emptied into any water course not having a current of three to five miles per hour, and then the sewage entrance should be at a distance one mile or more from the intake.

"Third—When the water supply of any city is a navigable stream the water should be sand filtered before being pumped into the city reservoirs or water mains.

"Fourth—For ordinary drinking purposes the water should not be taken in its primitive or raw state, but should be either filtered, boiled or distilled and aerated.

"Fifth— That not only chemical, but bacteriological examinations of the water should be made, at least once weekly, to determine its character as a safe or dangerous water for domestic use, and where contamination is shown to exist, the services of an engineer should be enlisted to detect, if possible, the cause and origin of such contamination."

At the request of Dr. Wende, Dr. Carpenter went with me on December 11, 1899, to obtain samples of water at various places. These were taken both at the surface and also six feet below the surface. They have been examined by the City Chemist and by the Bacteriologist. The water obtained from Buffalo River, opposite the life-saving station is described as "not fit for drinking purposes"; that obtained at the junction of the Buffalo and Niagara Rivers, opposite the lighthouse, is reported to be "bad water;" the water taken from the Niagara River, opposite the Bird Island Inlet, contained 3,773 bacteria per cubic centimeter, and is, therefore, bad water as compared with that taken from the tap on December 11th, which contained only 386 bacteria per cubic centimeter. The sample obtained at the Bird Island Inlet (Niagara River shore line) is described as "bad water" by the bacteriologist. Upon the other hand the water taken from the lake near the Horseshoe Reef known as Emerald Channel, was "good water," and contained only 373 bacteria per cubic centimeter. It is described by the chemist as "slightly turbid," although "good drinking water." I am well aware, of course, that to every pathogenic microorganism in water, there must be almost 100 which are nonpathogenic; but nothing would be gained by further reference to the general bacteriology of water at this time.

As Lake Erie is shallow, the average depth not being over 100 feet, the water from November to April or May, often contains a good deal of sand, which, when taken into the stomach, occasionally produces mild diarrhea, sometimes alarming to the sufferers and the newspapers, but otherwise unimportant.

Lake Erie now receives the refuse of so many cities that fully 1,000,000 people contribute to its contamination; and as the water for our city comes from the Niagara River—the so-called "focus point" of the great lakes—Buffalo is likely to suffer to an alarming extent, as the cities continue to grow and the refuse deposited in the lake increases in quantity. In my opinion it is the bounden duty of every city to do something toward the purification of its sewage, either by sterilisation or by some other process.

I want to say that our method of polluting streams and lakes by sewage is a growing evil and a very serious one. In many European countries it is forbidden by law and in this country such laws are imperatively required in order to preserve sufficient unpolluted water for the large cities. I shall return to this point later on. I wish now to draw your attention to the fact that our water is in danger of being additionally contaminated by the workers at the new steel plant, which is to be erected at Stony Point. We are told that a very large number of persons are to be employed there, and it is, in my opinion, the duty of the city to obtain some guarantee that this addition to the population will not involve increased contamination of the water. The condition is quite bad enough without any increase in the sewage. The Health Department has quite frequently told us that "the water is in poor condition," or that "there is evidence of contamination." Moreover, the statistics of typhoid demonstrate conclusively that while Buffalo compares favorably with other cities upon this continent, the number of cases of typhoid fever and the typhoid death-rate are far too high. I mean that, with our present knowledge the mortality rate from this disease can be reduced to 20 per 100,000 of population, provided we can induce the public to insist upon the necessary money being spent upon certain sanitary measures. Before mentioning these, I ask you to look at the number of cases of typhoid during the last six years. The death-rate per 100,000 of population has varied, since 1894, between 19½ and 60.

Number of cases of typhoid fever and of deaths from that disease since 1894:

	Cases.	Deaths.
1894	1,088	185
1895	397	98
1896	274	68
1897	201	63
1898	280	98
1899	211	87

Upon November 24th of last year (1899) Dr. Gram, of the Health Department, wrote to me that in 1898, 110 cases of typhoid were of soldiers sent home from the war, with 11 deaths.

The stirring up of Lake Erie by storms may have certain drawbacks, but it also has decided advantages. Dr. Drown, until recently a resident of Boston, has shown that the amount of oxygen in solution in the water of natural ponds and lakes decreases toward the bottom, until, when the bottom is finally reached, it is, in many cases, almost nil. In such cases, the aerobic microorganisms must

inevitably succumb to the anaerobic, which latter, including the bacillus typhosus, have a free field in which to develop to the utmost limit of luxuriance. The stirring-up which the storms produce will bring the beneficent action of oxygen and aerobic life to bear upon injurious microorganisms, which, otherwise would never experience such influence. Upon the other hand, while a gale continues, the deposited sewage of a considerable period of calm is thoroughly mixed with the whole body of water. If, however, you consider the facts in their entirety, you will, I am very confident, agree with me in the following assertion: no pollution of a lake or river by unpurified sewage is justifiable and a period has now been reached when the feasibility of treating the sewage of Buffalo by some scientific process ought to be considered. But I am specially anxious to impress upon you that, granting the pollution of the lake by other cities, we would nevertheless obtain much better water by constructing a new tunnel out into the lake than by taking it from the Niagara River, as we do at present.

I now request your attention to the question of sewage disposal. Several years ago Dr. Krauss pointed out that an act of Congress was urgently required prohibiting the "dumping" of untreated sewage in the lake or in any waterway which flows into the lake. But nothing has been done, and Cleveland, Buffalo and other cities all send their sewage without any attempt at purification, to mingle with the water of Lake Erie. These same cities take their drinking water from the same lake. In other words, we, citizens of Buffalo, numbering over 350,000, complacently drink raw water which must at times, contain raw sewage! In reality, the surprising part of this state of affairs is that typhoid fever has not caused more than 185 deaths in any one year since 1893.

The sewage system of Buffalo, however, is about to be improved, although the sewage will still continue to flow into the lake without any purification. For the following information I am indebted to the City Engineer, Mr. Bardol, and his assistant, Mr. Buttolph.

Under plans and specifications of the Engineer's office, contracts are about to be made for the drainage of the Hamburg Canal and its tributaries which, when completed, will about tax the present trunk sewer—the so-called Swan Street sewer—to its full capacity. In the districts south of the Hamburg Canal, and on both sides of Buffalo River, another system is necessary which will involve the construction of another trunk sewer, as well as several sewer-pumping plants. The number of sewers entering Buffalo River is seventeen; the num-

ber draining into the Hamburg Canal is fourteen; eleven flow into the Ohio Basin Slip, and nine into Cazenovia Creek. These drain a district having a population of 12,000 south of Buffalo River, and 26,000 north of that river—total 38,000. Buffalo River is further contaminated by receiving the drainage from foundaries (three), two chemical works and two oil refineries, one coach-glue factory, one linseed oil factory and the refuse from 24 elevators and 12 freight-houses, which employ 3,000 men.

I wish to urge most strongly that before any new plans are laid out for building sewers the whole question of sewage disposal ought to be thoroughly investigated by the city authorities.

In conclusion, then, I ask for the following measures as imperatively demanded with all reasonable speed.

First.—The construction of the new tunnel to the lake and another pumping station at the foot of Porter Avenue, and the purchase of new engines sufficient for the needs of the city, as advised by the aldermanic committee and the engineers.

The position of Buffalo in reference to its water plant is anomalous, for, while we have only one pumping plant, Boston has four pumping plants, New York has three, Chicago has eight and Philadelphia has ten.

Second.—The immediate consideration of all questions connected with the disposal of the sewage, with a view to the abatement of the existing evil.

Third.—The positive insistence by the city of some system of drainage at the new steel works that will effectually prevent any additional contamination of the drinking water.

339 DELAWARE AVENUE.

FAD, FACT AND FANCY IN MEDICINE.¹

By CLARENCE KING, M. D., Machias, N. Y.

FOLLOWING an old and well-established practice which seems to be common to nearly all scientific and many social and religious societies, it becomes my duty at this time to read to you a paper or essay upon some general subject, which you, by courtesy, is called an "address." Just how, or when, or where the custom originated which imposes this duty upon the retiring president I am unable to tell, and it would be difficult to ascertain correctly. But

1. President's address before the Thomas J. King Medical Club.

it affords me an opportunity to express my gratitude to the members for the patience and forbearance they have shown me, and also for the zeal with which they have responded and assisted me in my efforts to establish a new medical society. I sincerely hope that under the guidance of my successor this society will prove itself worthy of and will receive the support of every physician within the territory it seems to cover. But we must remember the Club will be what its members make it; hence, we should all strive to attend every meeting and make every effort to raise its literary and scientific standing to as high a plane as possible.

Our Club was organised one year ago for the purpose of bringing together in closer professional and social relation those physicians residing in the adjacent towns of Erie, Wyoming, Allegany and Cattaraugus counties who have heretofore been separated from each other in their society work by the sharp distinction of county lines. It was not our intent to injure the older societies, but on the contrary, we expected to help them by arousing a new interest in such work among those who heretofore have rarely attended the county societies. The Club thus far has more than met our expectations, but there are still a few who hold aloof from us for reasons best known to themselves. These we should again invite, personally, if possible, to join us, and point out to them the benefits which come from a smaller society which meets often; and at the same time let us assure them, both by word and action, of our loyalty to the older societies.

Having said all I care to in regard to our club and its prospects, I will now turn to my address proper. The subject I have chosen may not be of practical benefit to our patients, but I hope to make it of temporary interest to you at least.

If we turn back the pages of sacred history, we find that at one time the Creator of the universe commanded that there should be light and there was light. Then He collected the waters of the earth together and caused the dry land to appear, after which He brought into being every form of vegetation, the fishes of the seas, the birds of the air and the beasts of the land. Finally, the record tells us, He made man in His own image and gave him dominion over the fishes of the sea, the fowls of the air and everything which is upon the earth. From this we see that light, and we infer heat, electricity, gravitation and the other invisible forces of nature, existed for many centuries before the birth of man; yet it is only in comparatively recent times that the importance of these has been recognised and

an attempt made to turn them to practical utility. Moreover, while man was given dominion over the earth and everything upon it, these forces or phenomena of nature have ever eluded his grasp, although he is constantly trying to bring them also under his control. Some of these have already been put to some use, but much remains for succeeding generations to accomplish. Research in the field of electrical science is just now being conducted with remarkable vigor, and who can tell but that the electric current may be the lever, resting upon the fulcrum of human ingenuity with which some Archimedes may yet move the earth from its accustomed orbit? So, in developing the electric fad, we may be working upon dangerous lines, for if the equilibrium of the universe should be destroyed, we might be rushed to a doom more terrible than the confusion of tongues or even than the deluge.

A fad may be defined as a novel idea or a peculiar habit or method which suddenly becomes popular with a large number of people, generally at the neglect of other subjects. It differs from a hobby only in extent. Thus, a hobby might be called an *endemic* peculiarity, as it attacks only one individual and often remains permanently; while a fad may be the same peculiarity after it has become *epidemic* and infected a large number of people over a wide extent of territory, but which soon disappears and is followed by a new one. A hobby may always remain a hobby, or it may spread to others and thus become a fad. Likewise, a fad may continue a fad until it gradually dies out and disappears, or it may become established as a fact and prove a valuable addition to scientific knowledge and of inestimable worth to thousands of human beings. The antiseptic treatment of wounds, which originated with Lister, but was quickly adopted by his colleagues and soon became the popular practice among surgeons of the whole civilised world, may be cited as an illustration of a fad which proved more than a worthless theory. And if we will scrutinise history closely we will find that nearly every truth, every discovery and every important invention passes through at least one, if not both of these preliminary stages before it assumed its true place. Some few discoveries, it is true, have been made by chance and have immediately taken their proper place without any popular clamor, but ordinarily this is not the case. A person to achieve success must have an absorbing interest in his work, in other words must make it a hobby; and there are always plenty of people to endorse any new announcement or change of custom, especially if it promises to become a popular or fashionable fad. Every profession,

every trade, and every occupation has its own peculiar fads, but the more progressive the calling the more it has. Consequently the profession of medicine is full of them. They are as numerous as the rays of light which sparkle from the dazzling sun and most of them almost as transient. Each one appears suddenly and shines brightly for a time and lo! you wink, and it is gone. But another one quickly takes its place, just as bright and attractive as the one before which in its turn is soon lost sight of, unless perchance further thought and careful study sift it out as a kernel of truth among the chaff of nonsense. And thus, probably, it will be to the end of time or until human nature undergoes a radical change and the spirit of rivalry or the desire to win applause or public favor shall die out and become lost.

Fads may be divided into three general classes: First, the harmless fads which under no circumstances will injure anyone; second, the indifferent fads, which ordinarily are harmless but under certain circumstances may become harmful; and, third, the dangerous fads or those which are prejudicial to life or perfect health. It may seem strange that our profession, whose vocation it is to preserve life and restore health can entertain any fad of a dangerous nature, but a moment's reflection will convince us that it does. We have all at some time been guilty of some of them, probably under the belief that we were doing the best thing possible for our patients by following the latest and at that time most popular treatment; but further experience may have demonstrated that this particular line of treatment had absolutely no merit, or even nullified what chances there were of a speedy restoration to health. It is impossible for us to test clinically every theory and every remedy as they are announced, for they are legion and time and opportunity are wanting. We would do well to make the following the rule and axiom of our practice: Never be the first to adopt a new and radical theory or line of treatment nor yet the last. We better leave to those whose individual cases are securely hidden in a large hospital the experimenting in new and untried fields, while we cling to the truths and methods which have stood the test of careful trial and mature approval. By so doing, it is true, we will not come into sudden notoriety or have our names heralded far and wide as prospective benefactors of our race, but we will escape that severe criticism which always follows when it is believed the doctor is "experimenting" with human life. The country doctor's practice is always open to public scrutiny and his failures and his successes are alike known to all, however much he

may try to hide them; and gossip often adds to the one and prejudice detracts from the other, both to the doctor's disadvantage.

A fad may be thought harmless at one time, but later be recognised as dangerous, and it is for this reason that many fads are dropped. Likewise, some fads which might be classed as indifferent or even dangerous at first may become harmless when properly restricted by further study. The operative treatment of appendicitis may be given as an illustration of the latter, for while urged as the proper treatment for every case, it was dangerous as it included many cases which did not require operation; but when restricted to selected cases it has become as nearly harmless as any severe operation can be.

Medical fads of the first class, pure and simple, are few. If asked to name some of them we would all have to reflect awhile and probably no two of us would agree. Perhaps, climatic treatment is as good an illustration as we can give, as it is seldom or never attended with harmful results which can properly be charged to the treatment. The foreign fad, which supplies our journals and textbooks with foreign abstracts and quotations, furnishes our laboratories and dispensaries with foreign chemicals and drugs and fills foreign clinics with American students, is another fad of this class. Then there is the fad for conjoint labor, so popular with publishers and exemplified by the various "systems" and "encyclopedias" with which the market is flooded. All these are planned with a thought to their future sale rather than to merit and must necessarily be somewhat broken and inharmonious in their context.

The harmless fad is also often a silly fad. From time immemorial people have been seeking for the fountain of perpetual youth where the ravages of time and the cares of age might be effectually washed away. The reputed nectar of the gods has been sought for far and wide but never found. Oh! what joy greeted the announcement from Paris that at last the precious remedy had been discovered and that to use it would surely be to turn back the dial of our lives. No longer was the aged sire to totter beneath his burden of three score years and ten but by this potent testicular fluid he was to become a youth of twenty. But alas, what a pity! the sands keep running and father time is ever busy with his scythe just the same as before. That silly fad soon died out, but it left one offshoot which promises better things because its claims were not so extravagant.

Next followed the Burgeon fad for the treatment of tuberculosis, harmless at first, but dangerous afterward, because it temporised with time which is valuable to the consumptive at the beginning of

his disease. On this account it can be given as an example of the second class of fads, which is by far the largest class. This treatment is sought to neutralise the tubercular infection and supply oxygen by transforming the rectum into a breathing apparatus, but the rectum rebelled and refused to serve two masters. It soon became evident that oxygen was not the specific and that we might as well ask the healthy lungs to digest food as to expect the intestines to breathe; and soon asthetic people bolted on the whole theory as it brought no beneficial results whatever. And so this stands as another lamentable disappointment to the consumptive.

The third class of medical fads, or those which are dangerous to life or detrimental to health, are also very numerous. We can all cite illustrations by the score. Calomel used to be the panacea for every illness and salivation was no novelty. The lancet had its day and many patients were undoubtedly bled into their graves. Now, patent medicines seem to be a popular fad with the people. Their name is legion and their value small, although each may be of some use in certain cases. Then there is the twin fad to the patents which belongs to the profession as the patents belong to the people. I refer to the semi-proprietary remedies that are "sold only on physician's prescriptions," or "advertised only in medical journals." Our office tables are covered with reprints extolling them and giving clinical reports, covering fully as wide a range of diseases as is claimed for the patents. But while it requires fine discriminating powers to see the difference between these and the patients (for both are secret or might as well be), these pass as ethical and receive the sanction of the profession while the patents do not.

A few years ago the fad for oöphorectomy broke out and spread faster than measles or the grippe. Every tyro who had seen a case had to go to cutting and collecting ovaries in a jar; then he published the results of his labors, which showed him an expert and multitudes flocked to him for operation. Science and fashion demanded the sacrifice and the poor woman freely offered her ovaries upon the altar (or table) of the operator in support of her faith and the surgeon; but how many of those ovaries might have been left in their native element no one can tell.

In 1890, Koch, of Berlin, published a notable paper in which he announced the discovery of a new treatment for tuberculosis, the nature of which he for a time kept secret. This paper was followed by a second and later by a third communication, each promising such marvelous results that they set the whole world in a turmoil to

get full information and a supply of the wonderful lymph for trial. Medical journals published full reports to the exclusion of nearly everything else and societies called special meetings to send delegates to Berlin to investigate. Others went on their own account in a mad race to learn and get back, so as to distance all rivals and secure a rich clientèle. Thus the elite of the whole profession from the four corners of the globe made their pilgrimage to Berlin, like monks to the Holy City, and cast themselves at the feet of Koch and begged for tuberculin. For the time being Berlin was the most famous city in existence for it contained the balm of Gilead which was sought for by thousands. But, alas! our hopes were to be again shattered by disappointment. At present tuberculin is seldom used, except in lupus and as a means of diagnosis in veterinary practice, but the great number of tuberculin syringes now out of use, bear witness to the former popularity of this fad.

Again, there is antitoxin which has absorbed public interest for some time past, but is now dying out somewhat as a *fad*, because the novelty has worn off. Possibly this should be mentioned as a fad of the second class rather than the third, for certainly it can produce ill-effects if used recklessly. Statistics prove its great value in diphtheria, and under certain restrictions it is destined to occupy a prominent place in the treatment of that disease.

In speaking of the second topic of this address, that is, of fact I shall also consider its opposite—fallacy. There may be some difference of opinion among different persons in regard to fact and fallacy for it is well known we cannot all see things just alike. Lawyers know it is sometimes a difficult task to prove a fact which is plain to everyone. It was a long time before the circulation of the blood became generally recognised as a fact; and the fallacy of regarding insanity as witchcraft or evidence of the evil spirit was not discerned for many years. One proof of a man's ability in our profession rests upon his capacity to discriminate between fact and fallacy. "Good horse sense" may not mean superior education, but it generally does mean a successful man in whatever calling he may be. Diagnosis demands this natural faculty of good judgment before everything else, for without it book-learning is as naught and treatment founded upon fallacy can not be remedied by the most skilful art of the prescriber. Nature often does more for the patient and the reputation of the doctor than all the pills and powders we can give. This is a fact we must admit, however odious it may sound. Consequently, credit may be given us when none is due, but again we are often cen-

sured for bad results where the inexorable laws of fate have been against us, and it was beyond the power of man, whatever his attainments, to change the final results.

We might give numerous illustrations of fallacies in the medical profession, but few will suffice. We should not assume that every case of tuberculosis is necessarily fatal, even if Koch's treatment and Bergeon's method and a hundred others have proved worthless. Tuberculosis of bones and joints frequently result in cure under proper treatment and autopsies show numerous cases of cicatrised cavities in the lungs. Hope ought not to be abandoned with the diagnosis of nephritis, either acute or chronic; nor ought morphia to be administered for every trifling pain or ache. And, finally, it is a fallacy to believe that a physician's time and thought should be devoted wholly to his profession, year after year, without vacation. Relaxation from labor brings recuperation of strength, whether it has been the mind or the body which has been taxed. And a month's respite from his ordinary cares and trials spent in travel or pleasure far from home will bring renewed health and strength and add years to his life of usefulness.

Fancy in medicine is my third topic and I imagine you admonish me to be brief. Fancy is an attribute belonging to poets and novelists, and physicians rarely think they have the opportunity to indulge it. The science of medicine deals with the realistic and not the imaginative and its practice requires hard labor and constant application to duty. However earnestly we may wish success or favorable results they seldom come to us except through our own efforts, and even then they often are denied us. We can not plan our lives, as authors do their novels, and expect the future to bring out all the details in accordance with those designs. But as a pastime we can indulge our fancy in weaving day dreams or speculating on events to come and many a tedious and lonely ride can be made shorter and less tiresome by this diversion. If the masters of old could arise from their graves and look about them now they would imagine they had been transported to fairy-land and that the people around them were magicians, so wonderful are their abilities. Medicine has been a progressive science and has appropriated knowledge from every field to increase its usefulness. Its members have won for themselves great distinction for their attainments, their devotion to their work and their zeal in hunting out new truths and applying them. Already the bright day-star of their fame has arisen and is steadily ascending toward the unclouded zenith, wherever that may be. But who can

foretell what progress the next generation will produce? Electricity, which is now the motor-car to convey thought and sound between distant places, may yet be employed to carry rays of light which will enable us to see our scattered patients while still sitting in our office chairs. Some wise legislator may yet perfect a law which shall protect us from our greatest enemies; and the substituting druggist, the meddlesome neighbor and the various humbugs which combine to rob us will trouble us no more. Other wonders in different lines will doubtless be accomplished. Many diseases will be legislated out of existence by the sanitarian and others will lose their terrors. No one can believe the triumphs of surgery are exhausted yet and we can speculate upon its next successes. Already the abdomen and pelvis have been invaded by the knife and nearly every organ removed in part or entire. Perhaps the vital organs within the chest will next receive attention and operations upon the heart and lungs be successfully performed. Other operations will, of course, be devised to replace some now employed, which no doubt will surpass in novelty of conception, boldness of execution and final success any of those with which we are now acquainted.

And now I will indulge one more fancy and I am done. Possibly you consider those I have mentioned as doubtful; if so, I fear you will think this impossible and say we are drifting farther and farther from perfection, instead of toward it. But I think I see around us many signs which should cause us to rejoice. The superstition of former ages has been cleared away and in its place has arisen the bright orb of progress and reform. The present hour offers brighter prospects and is illuminated by nobler achievements than ever before. For us the golden age is dawning when everyone from the infant in its cradle to the hoary-headed sire beside his grave must feel the advantages of living in this enlightened generation. Few drawbacks there are to mar the splendor of the closing year of the XIX. century and already the horizon is opening out broader and brighter than ever. Civilisation is making rapid progress and man is becoming more refined in his tastes, his customs and his habits. Christianity is spreading in every land and to every people and the vices and errors of life are being encompassed in narrower bounds. But our fancy can paint still brighter pictures for our posterity and our anticipation hope for still better days to come. All things are said to work together for good to those who have faith and therefore let us trust that at some time in the near future, within *our* lifetime if possible, there may come the day when human nature will be trans-

formed and when all persons will be honest from choice. And when that time comes, if it ever does, we think the people will appreciate the exacting and self-sacrificing labors of the medical profession and we will receive the same courteous treatment that is accorded to other occupations. Then, too, the people will realise that we must have compensation for our work and that a doctor's credit is limited like other men's and his purse often needs replenishing. And as the great family of dead-beats, from whom we now suffer most, will then be extinct, so then it will not be necessary for us to invoke the saber or the lash or the courts of law to obtain recompense for services faithfully performed. Fortunate, indeed, will they be whose lot is cast in such an age for it would usher in the millennium when all men would be made perfect.

DESICCATED SUPRARENAL CAPSULE IN ACUTE CORYZA.¹

By FREDERICK H. MILLENER, M. D., Buffalo, N. Y.

I WISH to beg the indulgence of the Academy for presenting a subject which is apparently so trivial as the relief of an acute coryza. An eminent professor, I believe it was Professor Hare, of Philadelphia, once remarked, that the reason our homeopathic brethren are so uniformly successful in their practice from both a worldly and medical point of view, is not because their theory and practice is proper and scientifically correct, but because of their attention to details, and it is certainly not that they cure disease, but rather that they alleviate the painful symptoms and allow nature to effect the cure, for as soon as the pain is gone the patient is patient indeed.

During the last year or two much work has been performed for the determination of the function of the suprarenal capsules, and of their possible use in therapeutics. It is not yet settled whether or not they contain a true active principle, much less what that active principle is. They certainly contain some toxic substance. It is demonstrated from the action possessed by the suprarenal capsules, or their extract, that they contain an active principle which is the most powerful substance known as a direct or indirect stimulant of the vaso-motor system, resulting in a decided rise of the blood pressure. This great increase in arterial pressure, after the ingestion of this gland, or its

¹ Read before the Surgical Section of the Buffalo Academy of Medicine, December 5, 1899.

extracts, is due to the extraordinary power they possess over the muscular fibers in the walls of the arterioles. One tenth of a grain of the desiccated gland causes a maximal effect upon the heart and arteries of a twenty pound dog. From this the conclusion is drawn, that its principle is capable of occasioning a well-marked physiological effect, in the dose of one eight-hundredth of a grain, in an adult man. In the *Wiener Medizinische Blätter*, November 11, 1897, Velich points to the local anemia in mucous membranes occasioned by the local application of the suprarenal extract. He described the action of the extract on the unbroken skin and also arrived at the conclusion that this preparation, when applied to the broken or unbroken skin, produces a local anemia. He has observed that the normal florid color of the skin vanishes, and draws attention to its effects if applied to portions of the epidermis affected with eczema.

It is extremely interesting to note that when the drug is applied to epidermis reddened by eczema or scalding, its action is always confined to the site of its application. The aqueous extract, according to Bates, is a powerful astringent and hemostatic. Internally, it increases the action of the heart, but considerable quantities may be ingested without apparent injury. Its use hypodermatically requires careful watching; locally applied, the drug is never followed by any constitutional symptoms or manifestations. In an instance referred to in the authority just mentioned, ten grains occasioned alarming effects—the face became livid and there were throbbing pains in the head and chest; the pulse was weak, but consciousness remained clear and the patient soon recovered.

Bates further states, "when it is instilled into the eye the conjunctiva of the globe and lids is whitened in a few moments." It has been noticed that the same effect takes place in the nose and naso-pharynx and none of the usual drugs, including cocaine, can produce such an astringent effect. It was therefore applied to a congested condition of the nasal mucous membrane such as is present in an acute coryza. The aqueous extract was prepared by dissolving twenty grains of the dried extract in half an ounce of water and filtering through cotton. The drug should be applied by first cleansing the nose and naso-pharynx with an alkaline wash made up of sodium salicylate, sodium bicarbonate and boracic acid. The aqueous extract of suprarenal capsule is applied to the nasal membrane on pledgets of cotton, and posteriorly to the naso-pharynx by means of an atomiser.

In order to get the best results the extract should be made up fresh as it will not keep in a warm room, and if it is dissolved in a saturated solution of boracic acid it does not work as satisfactorily. The patient is thus relieved of a very distressing condition for two or three hours, or until such time as the patient may use a mercurial purgative or otherwise get rid of this condition. I merely wish to state that extract of suprarenal capsule may take the place of that dangerous drug cocaine with great success for relief of congested mucous membrane. The extract may also be employed in some of the more or less bloody operations on the nose. The extract prevents hemorrhage because of its property of contracting the small arteries and arterioles. After hemorrhage begins the extract is not efficient.

It is possible to perform almost any operation in the nose or on the nasal membrane almost bloodlessly, providing you insert a pledget of cotton wool soaked with 5 per cent. solution of cocaine into each nostril, leaving them in *situ* for five minutes. On withdrawing these, similar pledgets soaked in solution containing five grains of suprarenal gland to the ounce are introduced and left there for the same length of time. The extract is not an objectionable hemostatic. It does not form clots like iron or irritate as does peroxide of hydrogen.

5 NORTH PEARL STREET.

Society Proceedings.

BUFFALO ACADEMY OF MEDICINE.

Reported by Thomas F. Dwyer, M. D., Secretary.

THE regular quarterly meeting of the Buffalo Academy of Medicine was held at the Academy parlors, Palace Arcade, Tuesday, December 5, 1899.

The meeting was called to order by the President. Dr. M. D. MANN, at 8.45 p. m.

The minutes of the last quarterly meeting were read and approved.

The council recommended the election of Drs. Cornelius J. Carr, Adele A. Gleason and James S. Trotter for resident membership. They were separately balloted for and elected Fellows of the Academy.

The council recommended to the Academy that the petition for a new section of ophthalmology, otology, rhinology and laryngology,

which had been referred to them at the last quarterly meeting, be granted.

Dr. A. G. BENNETT moved that the Academy allow the formation of the new section. Carried.

The section of surgery provided the following program: The value of normal salt solution in surgery, Dr. Chauncey P. Smith; Hypertrophy of the prostate, Dr. Charles F. Durand; Desiccated suprarenal capsule in acute coryza, Dr. Frederick H. Millener (p. 585).

Dr. C. P. SMITH said irrigation with salt solution was used to restore volume to the blood following hemorrhage, to lessen shock, and to "wash the blood," as the French term it. This solution does the least damage to the cells and is therefore very valuable in the treatment of wounds by irrigation. Large quantities of solutions of mercuric chloride produce necrosis, thrombosis of vessels, and the like, thus injuring tissue regeneration and causing slow repair; and there is large loss of its germicidal action by conversion into the inert albuminate. This is true of all germicides which depend upon chemical reaction for their efficacy. He has used salt solution baths in cases of burns of the third degree, and while in the cases reported the burns were in area equal to from two-thirds of to the whole body and therefore probably fatal, the patients all improved under the use of scrubbing and immersion in salt water. In these cases he also used normal salt solution as an enema and as an intravenous injection. A high enema of normal salt solution before operation is recommended in order to combat shock from lowering of temperature and loss of blood. In the treatment of shock he advises the frequent repeated enemas of 500 to 1000 c.c.

Dr. EUGENE A. SMITH said that in washing out a peritoneal cavity in which sero-purulent fluid is found, he has some hopes now of saving patients by using large quantities (about twelve quarts) of normal salt solution. He has seen areas appearing like diphtheritic patches fade away under this treatment. He injects it under the breasts in shock in females, using a small quantity, alternating under each breast, it being absorbed in a short time. If it can be absorbed so readily under the breasts it can be taken up by cellular tissue anywhere.

Dr. S. Y. HOWELL said the flooding with water originated with Lawson Tait, who flooded the abdominal cavity with water taken from the tap and heated. Price also does it in this simple way. Not only in the irrigation of the peritoneal cavity has it shown its efficacy, but

also in shock or great anemia. He questions the advantage of using salt solution, deeming pure water adequate.

Dr. H. D. INGRAHAM uses salt which has been sterilised and obtained better results in shock and hemorrhage than with sterilised water alone. He mentioned the success he has had in using salt solution per rectum for suppression of urine after anesthetics.

Dr. C. E. CONGDON has had some experience with use of saline solution. Formerly he washed out the abdominal cavity, but he does not do so now, for the reason that he thinks the peritoneum is more liable to absorb pathogenic germs after using saline solution. He simply wipes away as much as possible with gauze; sometimes he drains and at other times he does not.

Dr. C. P. SMITH, in closing, said it was simply the mechanical effect of the fluid that he referred to, not its antiseptic effect. He does not use ordinary water because it would destroy the superficial layer of the endothelial cells.

Dr. CHARLES F. DURAND gave the histology, embryology, comparative anatomy and analogy of the prostate. He classified hypertrophy into (1) uniform enlargement; (2) increase of the stroma or fibroid hyperplasia; (3) increase in the glandular elements; (4) tumor formation. Intrinsically hypertrophy of the prostate was unimportant, but was secondarily important because of its effect upon the urethra and upon other glands and structures.

Dr. J. HENRY DOWD took exception to the statement that hypertrophy began at age of 55; he thinks that hypertrophy begins from puberty on; congestion, gonorrhea, syphilis, and the like, during all this time cause the hypertrophy.

Dr. F. H. MILLENER—While the use of desiccated suprarenal capsule internally or hypodermically requires careful watching, locally applied the drug is never followed by any alarming symptoms. When applied to a congested condition of the nasal mucous membrane, such as is present in an acute coryza, there is a rapid whitening and shrinking of this membrane. The aqueous extract is prepared as desired for use by dissolving 20 gm. of the dried extract in half an ounce of water and filtering through cotton. After cleansing the nose and naso-pharynx with an alkaline wash, the solution is applied either on pledgets of cotton or by means of an atomiser, and the patient is relieved of a very distressing condition for several hours.

Dr. Millener showed a new tongue depressor with electric light from a small pocket four cell dry battery.

Attendance, 21; adjourned at 11 p. m.

Section on Surgery, January 2, 1900.

REPORTED BY MARSHALL CLINTON, M. D., Secretary.

MINUTES of the meeting of the surgical section, held Tuesday evening, January 2, 1900.

Minutes of previous meeting were read and approved. Attendance, 28.

Subject for the evening :

DISCUSSION ON THE PROPHYLAXIS AND TREATMENT OF URETHRAL STRICTURE.

This discussion was opened by Dr. W. C. Phelps, who said the prophylaxis of urethral stricture resolves itself into the treatment of acute gonorrhea, for surely a case cured will have no stricture. We find strictures are usually due to uncured clap. I have seen cases in which there was no history of clap or trauma, which I believe were caused by masturbation. The three causes of all urethral strictures are: Clap, trauma, and masturbation. The treatment of stricture as usually followed out by me is based on the large number of cases I have seen during my service at the Buffalo General Hospital, where we get the worst classes of cases. Some of them are mild, and the treatment of a mild case is done very well by gradual dilatation, or electrolysis. I have used both quite a bit and hardly know which is the best treatment, but I do know that in old sinus bad cases that electrolysis is of no use at all. The query naturally arises: What is a mild case? A case of not long standing, when there is not much infiltration on the periurethral tissue, and the stricture will admit a small French sound or bougie may be called mild.

Personally, I do not like a bougie, as in my hands a sound is much more satisfactory, and I can use it with more safety to the patient. In bad cases we can pass a filiform only, or not even that. Dr. E. M. Moore always said he could pass a catheter in any urethra but I once saw him fail. He used a sharp silver catheter and railroaded through a stricture into the bladder. In some cases it is impossible to even get filiforms in. The thing to do when you can get a filiform in, is to work another along side of it and tie two, or four if possible, in the urethra and leave them there over night; no longer, or they may cause an attack of urethral fever. After working in a filiform past the strictures pass a Gouley or an Otis dilator over the filiform and dilate. I am afraid of dilatation of old dense strictures and feel much safer when I have done an external urethrotomy, and in cases where you can't get a filiform in always do an external

urethrotomy. This is hard work without a guide, for the operation may take one to two hours.

I once saw Dr. Miner begin an external urethrotomy without a guide; he worked two hours and a half, and then gave it up. For some reason or other though, in cases wherein the operator doesn't get into the bladder, the stricture seems to be cut anyway and the patient voids his urine after the operation. In regard to internal urethrotomy: In cases where the stricture is anterior to the pubes we may cut with the urethrotome and then dilate; but in strictures of the deep urethra this is not safe. I don't always see the reason for it, and if I get an Otis dilator into the bladder I dilate. Sepsis may be a danger, but I irrigate the urethra with a bichloride solution first, and then fill it with an iodoform emulsion in oil. I put in two or three syringefuls, for the ordinary urethral syringe does not hold enough to satisfy me that the urethra is filled. Always fill the urethra both before and after a stricture is cut or dilated.

In regard to cocaine: In bad cases I prefer a general anesthetic as we can handle the patient better. Cocaine works nicely, but I learned early not to use it more than once at a sitting. I leave it in ten to twenty minutes and then go to work, but I do not put it in more than once. If after cutting or dilating I cause pain, I do not use more cocaine but stop work, as I have seen fatal results from renewing the cocaine, which was undoubtedly absorbed by the new cut or torn surfaces.

Dr. VAN PEYMA—What is the usual dose of cocaine?

Dr. PHELPS—From three-quarters to one grain. I like to dilate pretty well after cutting up, generally to a 40 French. I like to see a 30 French sound pass in easily.

Dr. HOWELL.—Do you put a 40 in any part of the urethra?

Dr. PHELPS—Yes. If the urethra is strictured it will tear, but if not it will dilate to a 40. I do not think strictures return after they are dealt with as I have indicated.

Dr. S. Y. HOWELL—My experience is more limited in urethral trouble than Dr. Phelps's, but there are certain lessons to be learned in this line of work. In the first place, I think there is a very inadequate idea as to the necessity to life of the preservation of the patency of the urethra. I shudder when I think of the young laity who think that clap is a necessary adjunct to manhood. Their ignorance is a crime to be charged against our profession. It is a fearful mistake for physicians generally not to impress on young men

the dangers from this disease. The degenerations that follow from a damming back of the urine in the ureters, pelvis and urinary tubules are serious. A young man has chronic clap and frequently does not know it. We should impress on young men the absolute necessity of certain cure. As they grow older they may notice they have a good-morning drop. Sometimes it is profuse, enough to wet the glans penis. They are generally ignorant of the cause of this or the changes that are taking place in their urethras.

We are, of course, all familiar with the pathology of stricture—thickening, infiltration, and contraction. The obvious indication is to abate the seed of irritation at once. When only the superficial mucous membrane is infected I think it can be very easily cured. The gonococci do not penetrate deeply until exfoliation has taken place. Impress on your patients the value of irrigation. My favorite is permanganate of potassium. Cases we see of gleet have a local hyperemia, hyperplasia, and hence a subsequent stricture. This shows the necessity of early cutting these cases that have a slight discharge. My treatment of strictures has always been conservative. I am afraid of a knife without an external urethrotomy, especially if the stricture is in the deep urethra. Here is a case: Dilatation up to No. 30 French, cut two or three times with the urethretome. There was some hemorrhage. After two days the temperature went up to 105 or 6. Frightful urinary infiltration, followed by general sloughing.

I think the urethretome in deep parts is decidedly dangerous. My plan is this: First use an Oberlander dilator, with cocaine anesthesia. Do not try to dilate all at one sitting. Wait four or five days and try again, when we find we can generally introduce a No. 35 or 36. Always after sounding, wash out the urethra with a permanganate solution. I never have had a case of subsequent infection by this method.

Dr. DUNHAM—What are your methods of irrigating?

Dr. HOWELL—The usual way, with a glass return flow tip, the bag holding the solution being held about three feet above the level of the patient's urethra, and using two quarts at a time. The strength is from 1-4000 to 1-7000. I advise patients after an operation on the urethra to use the normal hydrostatic pressure of the urinary stream by closing the meatus while they urinate, thus dilating the urethra.

Dr. M. HARTWIG—My experience with passing sounds or catheters tallies with Dr. Moore's. I have never failed to pass a bougie in cases

of stricture, except in two due to trauma. A small trick to pass a bougie is often necessary, and that is to fill the urethra with oil. Patience is a requisite for it may take three hours before the stricture will allow the bougie to pass. Another trick is to introduce it by a sawing motion. After one bougie is introduced pass the next one beside it by the same method of gently sawing, and at the same time keep the urethra filled with oil. Another thing: prepare the patient by giving urotropin for forty-eight hours before. It is the only drug in my opinion that is valuable in sterilising the genito-urinary tract. In regard to the remark that stricture may be developed from masturbation, I doubt it. It may be clap, trauma, or may be congenital. I once saw a boy seven years old with a stricture, which was undoubtedly congenital. A normal urethra will hold three drachms or more; most of the syringes are altogether too small. After a stricture is cut or dilated we should advise dilatation every half year, or year, for life. I do not believe they will not recur. Bad ones always do. I have had cases shrink in three years from a No. 18 French to a filiform. Plastic operations for the cure of stricture have not been spoken of. These operations are rare, but they may cure the stricture. I have done one on a small ring stricture of traumatic origin. I have never heard of mucous membrane being transplanted, but do not see why it cannot be done.

Dr. J. HENRY DOWD—I am of the opinion that at least 98 per cent. of urethral strictures are due to gonorrhea, and that a large majority of them are preventable if the urethral inflammation is entirely cured. A cure of gonorrhea is not complete when the discharge has stopped, but when the urethral mucous membrane is in a normal condition, as is evidenced by the state of the urine. If inflammation exists in localised spots it may not be of severity to produce pus, which may appear at the meatus, but can be brought out by cleansing or rather washing the membrane which is done by the urine. Therefore, if there is no discharge but the morning urine contains small shreds and débris, which under the microscope are found to consist of pus and degenerated epithelium, it indicates localised inflammatory spots, which if left alone sooner or later extend to the deeper tissues and are followed, as all productive inflammations are, by cell proliferation with plastic infiltration and scar or stricture production.

The prevention of stricture lays in the fact of bringing about complete resolution in the specifically inflamed membrane. This is best accomplished by the use of full-sized sounds, which must be

proceeded by an antiseptic and followed by an astringent. I have never seen a stricture which was caused by masturbation. (See White's remarks on his investigations while surgeon to the Eastern Penitentiary of Pennsylvania.)

Although electricity is advised I have never had any experience with it and therefore cannot speak with any authority. I believe, as does Reginald Harrison, that no stricture ever closes the lumen of the urethra completely. It must be kept in mind that stricture tissue is very irritable and that the least touch of an instrument only serves to cause a spasm, which will often prevent the passage of even a steel sound. If in these cases cocaine is used or an anesthetic given, it will be found possible in most every one to pass a filiform. I am in accord with Dr. Phelps's opinion not to use cocaine after hemorrhage has started, but it is safe beforehand.

I am against the cutting of strictures, except in certain well defined conditions, and I cannot too forcibly express my opinion against the cutting that is being done almost every day in the offices of physicians and surgeons. I cannot add to Dr. Howell's able description of the damages resulting to the prostate, bladder, pelvis and kidneys from old tight strictures, but one thing might be suggested, and which I have practised in the hospital for some time—namely, cut every case of stricture coming for treatment in the public wards of a hospital. My reasons for this are that if we treat by gradual dilatation as soon as the patient can urinate, if only in a very fine stream, he immediately leaves and is not seen again until another closure takes place. In the meantime the organs are suffering, as described by Dr. Howell, and it is only a matter of time until some incurable complication arises which consigns him to some hospital at the expense of the city. On the other hand, if he is cut at once it necessitates his remaining in the hospital for at least four weeks, and during that time four or five full-sized sounds can be passed, which will prevent a recontraction, even though he does not resort to dilatation again for years.

Other conditions where cutting is necessary might be mentioned as resilient, tough, fibrous, traumatic strictures, and those where great irritation, severe hemorrhage, or chill always follow the passage of a sound. I should advise for the safety of the patient that the perineum be opened in all such cases.

Antisepsis must not be forgotten when dealing with the urethra, either with the knife or sound. I cannot agree with Dr. Phelps that it is ever necessary in the human being to cut the urethra to a caliber

of 45 French. I do not believe in making a ship canal of the urethra. I am aware that it is normally about 40 to 45 at the bulb, but in the penile portion it diminishes to about 30. If nature has arranged things thus, why should we enlarge? I should say that an average of 30 F. is large enough to cut any canal.

I now show you a new way of dilating filiform strictures. (Instrument shown.) Rubber sounds will bend, crack or break, causing at times more trouble than any good they may do. A filiform is easily passed, especially after the first, and then all that is necessary is to have the tunnel sound follow along over it, increasing the numbers about four at each sitting until No. 20 F. is reached. This mode of treatment has its disadvantages, and to avoid trouble certain restrictions must be observed. The urethra is always more or less dilated and thinned both in front and behind the contraction; therefore, great care should be used not only in introducing the sound but also in withdrawing it, lest the thinned tissues be torn across. Too much force should not be used in pushing the tunneled sound forward, as it is possible to cut the filiform in two, thus necessitating a cystotomy for its recovery. Sounds must not be passed after urethrotomy for at least six days, excepting the one that is used immediately following the operation. I have seen some very serious results from the too early and frequent passage of sounds following urethrotomy.

Three or four important points should never be forgotten when dealing with stricture of the urethra: (1) Excluding progressive resolution from an acute gonorrhea, well formed shreds in a clear or semi-clear urine is indicative of stricture.; (2) as 67 per cent. of strictures are located in the deep urethra and most of them close to the compressor muscle, it is at once evident that the searcher (never anything but a bulbous instrument) should be made to pass this muscle, such being evidenced by the sensation of urination experienced by the patient; (3) when using sounds, the same sensation must be produced, otherwise a deep stricture may remain undilated; (4) after the passage of a sound and the canal has been flushed by an astringent solution, the finding of a bloody shred is positive evidence that a stricture existed and has been dilated.

Dr. C. F. DURAND—I have long thought that the older boys in the public schools should be taught the effect of gonorrhea and cautioned. Masturbation does not cause stricture. The question arises: When is gonorrhea to be regarded as cured? When the discharge has stopped, the shreds few and far between, then use a

strong solution of silver nitrate and if no gonococci are found in the resulting discharge then we can call the case cured. When a stricture is deeper than the bulb an internal urethrotomy should not be done. The same holds good for divulsion. In these conditions an external urethrotomy should be made and in all cases in which there is a cystitis. Strictures are of two varieties: where the follicles are not affected and the stricture dilates easily; and where they are infected and they do not dilate easily.

Dr. P. W. VAN PEYMA—My familiarity with strictures of the urethra existed about twenty-five years ago, when I was in New York. I remember very well seeing strictures opened by forcing a sound along the normal curve of the urethra while the patient's heels and head would go flying into the air. I know the sounds went into the bladder, but what they went through before they arrived I don't know.

Dr. PHELPS—I omitted to mention that in every case of stricture the urine should be examined to ascertain the condition of the kidneys before any operation is attempted on the genito-urinary tract. I remember very well one case on which an external urethrotomy had been performed and the post mortem showed a surgical kidney filled with pus.

Dr. VERTNER KENERSON—I should like to ask Dr. Van Peyma if he has ever seen a case of stricture of the female urethra?

Dr. VAN PEYMA—No.

Dr. DOWD—I have seen a case of stricture of the female urethra I should like to report. This case was brought to my attention by a nurse who on passing a sound noticed that the urethra bled. Following that, she was troubled with passing her water and came to me for relief. I examined her and found a stricture three-quarters of an inch back from the meatus. I dilated it once with graduated sounds and it cured her, I suppose, for neither the patient never came back for treatment.

ACCORDING to an exchange, a project is about to be launched in Colorado which is apparently of more value in the treatment of consumptives than anything that has heretofore been offered. It is proposed to establish from Denver south a series of plantations, which shall be under state control, but so far as possible will be made self-sustaining by the labor of their inmates. These are to be opened to consumptives who can afford the price of transportation.—*Med. Age.*

Progress in Medical Science.

PHYSIOLOGICAL CHEMISTRY.

By JOHN A. MILLER, Ph. D., Buffalo, N. Y.

TOXALBUMIN FROM THE COMMON EEL.

ELOPHE BÈNECH (*Compt. Rend.*, 1899; *J. Chem. Soc.*, 1899) The flesh of the common eel contains a toxalbumin, which, when injected into the vein of the ear of a rabbit, in the proportion of 0.02 gram per kilogram of body weight, causes paralysis, followed by death in about six hours, the blood being dark colored and partially coagulated. It is precipitated by ammonium sulphate, but not by magnesium sulphate. Acetic, hydrochloric, sulphuric, and nitric acids produce a slight turbidity, soluble in excess, but alkalies have no action; alcohol produces an abundant coagulum. The substance gives the biuret reaction, and reactions with tannin, platinic chloride, and the reagents of Tauret, Esbach, Mehn and Millon. When dried it is a yellowish-white powder with a disagreeable taste and an acid after-taste.

ACTION OF IODINE AND IODINE COMPOUNDS.

R. HEINZ (*Virchow's Archiv.*, 1899; *J. Chem. Soc.*, 1899). Iodine injected into the serous cavities sets up an adhesive form of inflammation, necrosis of the tissues and increased diapedesis of the blood corpuscles. Of the chloride, bromide and iodide of sodium, the last named is the most powerful. The chlorate, bromate and iodate act as oxidising agents, but only the first-named produces methalmoglobin. Special attention was paid to the activity of sodium iodide; it produces an increase in the leucocytes and of lymph formation. Binz's theory that the action is mainly due to the liberation of iodine is accepted.

ADMINISTRATION OF SUPRARENAL EXTRACT BY THE MOUTH IN HEALTH AND DISEASE.

O. F. F. GRUENBAUM (*Proc. Physiol. Soc.*, 1899; *J. Chem. Soc.*, 1899). In health, administration of suprarenal tabloids by the mouth produces no rise of blood pressure, because the extract is not absorbed quickly enough; this renders a good hemostatic, especially in cases of hemorrhage from the walls of the alimentary canal and bladder.

TOXIC ACTION OF SUGARS.

JULIUS VON KOSSA (*Pflüger's Archiv.*, 1899; *J. Chem. Soc.*, 1899). Large doses of sugar injected subcutaneously, or small doses repeated for a long time, produce pathological changes in the organism. The sugars used in the research were principally cane sugar and dextrose; the animals were birds and mammals; the symptoms observed were cyanosis of the comb (in birds), bronchial catarrh, edema of lungs, diarrhea, muscular weakness and sleepiness, incoördination, polydipsia, a gouty state, nephritis and an increased secretion of total nitrogen, urea and ammonia in the urine. Special attention is directed to symptoms similar to those seen in diabetes.

THE FIRST PRODUCT OF THE GASTRIC DIGESTION OF CASEIN.

ERNST SALKOWSKI (*Zeit. Physiol. Chem.*, 1899; *J. Chem. Soc.*, 1899). Under favorable circumstances casein is wholly digested by gastric juice; under unfavorable circumstances (too low a temperature, or too little digestive fluid) there is a residue of paranuclein. Before this, however, there is a primary stage in which the casein is converted into a proteose which contains all the phosphorus of the original proteid. Casein and caseinogen are in this respect alike.

CHEMISTRY OF MALIGNANT TUMORS.

EUGEN PETRY (*Zeit. Physiol. Chem.*, 1899; *J. Chem. Soc.*, 1899). Extracts of cancerous tumors were made with 0.6 per cent. solution of sodium chloride, then with cold water and finally with dilute alkali. From these extracts, the total proteid was estimated; albumin, globulin and nucleo-proteid were found. There is increase of nucleo-proteid as compared with normal tissues. In a sarcoma, there was very little nucleo-proteid. There is, in these tumors, a considerable amount of proteid which is not coagulable by heat. By autodigestion at the room temperature, this albumose-like proteid increases in quantity.

INFLUENCE OF ALCOHOL ON RESPIRATION IN MAN.

HERMANN WENDELSTADT (*Pflüger's Archiv.*, 1899; *J. Chem. Soc.*, 1899). Large doses of alcohol increase the respiration in most cases in men who are not fatigued, although sometimes only to a small extent. In fatigued individuals, the increase is always seen and is much greater. This action is seen at its best if the alcohol is administered as a wine with rich bouquet.

TOXIC ACTION OF SODIUM FLUORIDE.

HERBERT B. BALDWIN (*J. Amer. Chem. Soc.*, 1899). Sodium fluoride, taken in doses varying from 0.25 to 9 grams, produces nausea, vomiting and salivation, frequently diarrhea, the effects varying in intensity with the constitution of the individual. In one case, where 10 grams were accidentally taken by a man, death ensued within twenty-four hours. In cases of suspected poisoning, the urine may be advantageously tested for fluorine.

PHYSIOLOGICAL SIGNIFICANCE OF ALCOHOL IN THE VEGETABLE KINGDOM.

P. MAZÉ (*Compt. Rend.*, 1899; *J. Chem. Soc.*, 1899). When peas are placed in contact with water, they gradually diminish in weight and in the water relatively large quantities of alcohol are found. Thus 100 peas in 100 c.c. of water at 22-23° yielded 4.63 per cent. of their weight of alcohol in four days and 10.54 per cent. in thirteen days; starch and small quantities of reducing sugars were also found in the water. Peas from which the embryos have been removed give a similar production of alcohol and also a distinct odor of aldehydes. Alcohol, thus appears to be a normal necessary product of the digestion of the carbohydrates of peas during development and it is probably formed at the expense of the glucoses in the living cells by a diastatic process.

PENTOSE IN THE URINE.

ERNST SALKOWSKI (*Zeit. Physiol. Chem.*, 1899; *J. Chem. Soc.*, 1889). The reactions examined for the detection of pentose in the urine were: (1) The Tollens reaction with phloroglucinol and hydrochloric acid; (2) The Tollens reaction with arcinal and hydrochloric acid; (3) the test with aniline acetate paper; (4) the occurrence of furfuraldehyde after distillation with hydrochloric acid; and (5) the preparation of the osazone. Each test is described with full details and the precautions that are necessary. After the use of certain drugs, such as menthol and chloral, these tests, especially the first, may be positive without the presence of pentose; glycuronic acid also may be a source of error. In the presence of dextrose, pentose can still be detected, after the removal of the sugar by fermentation. Three cases of pentosuria are described. The origin of pentose in the body is discussed, and the view that it originates from the nucleoproteids in the pancreas is dismissed. It is regarded as probable that it originates from hexoses.

DETECTION OF ALBUMEN IN URINE.

GABRIEL GUÉRM (*J. Pharm.*, 1899: *J. Chem. Soc.*, 1899). A 10 per cent. aqueous solution of di-iodopara-phenol sulphonic acid (soziodol) is a very delicate reagent for the detection of albumin in urine. 10-15 drops of the reagent when added to 8 or 10 c.c. of the filtered urine produce a whiteish, flocculent precipitate or a milky turbidity if albumin is present. Albumoses, peptones and some alkaloids are also precipitated by it, but their precipitates readily dissolve on heating, whereas that produced by albumin is completely insoluble. Alkaline urates and uric acid are precipitated by this reagent.

GENITO-URINARY AND SYPHILITIC DISEASES.

CONDUCTED BY BYRON H. DAGGETT, M. D., Buffalo, N. Y.

EXCRETION IN THE TREATMENT OF ACUTE INFECTIOUS DISEASES.

H. A. McCOLLUM (*Philadelphia Medical Journal*, January 13, 1900.) says that purgation, diaphoresis, emesis and diuresis have a much wider range of usefulness than is generally recognised. The clinical physiology of excretion is obscure. The amount of lymph in the human body exceeds that of the blood three or four times, and the importance of this primeval circulation can scarcely be overestimated. How lymph is enriched and purified is a mooted question, but it is agreed that diminution in the quantity of blood and increase of vascular area will force it into the blood current and increased capillary pressure drives more blood plasma into the lymph circulation. All the salines, such as the soda, magnesia and potassium compounds cause an interchange between the blood and lymph and are called lymphagogs. This interchange occurs between the lymph spaces and the blood capillaries.

The thoracic duct supplies but a fractional part of the lymph to the blood when bleeding. The last flow is more dilute than the first, even though the thoracic duct be ligated. The varying pressure of arterial capillaries and venous capillaries cause tissue irrigation. The tissue spaces are reservoirs anatomically independent of both blood and lymph capillaries, yet they supply or interchange with both systems. Tissue oxidation produces tissue activity and then follows excretion.

¶ Shafer, speaking on the internal secretion of glands, says: "In one sense all the tissues and organs of the body form internal secre-

tion, for they all pass into the blood materials which have been formed as products of metabolism." Internal secretions give to the lymph not only waste products, but other products that are to be of use to the system.

The internal excretions supply defensive proteids (antitoxin) in all probability and their function in duplex. Research as shown that the action of blood-letting, emesis, cold-baths, purging, and the like, support this view.

The vital activities of the tissues promote internal excretion and internal excretion in turn protects the body tissues, especially the central nervous system from the baneful effects of toxins. "The decisive battle-ground in acute infectious diseases is in the central nervous system, when the rhythmically acting vasomotor, cardiac and respiratory centers must be preserved intact from harmful toxins." A saline purge acts as an internal excretion agent and secondly as a purgative.

T. Landor Brunton says that a purge acts as an internal excretion agent and as a promotor of serum therapeutics.

Maurel and Robin allege that blood-letting, blistering and emetics act much alike in increasing oxidation and leucocytosis. The cold bath in fever acts by increasing internal respiration or oxidation and metabolic activity.

Venesection, purging, emesis, diaphoresis, diuresis, and the like, are most valuable auto-serum therapeutic agents. These valuable forms of treatment have fallen into disfavor; the newer medicine is bringing them to the front again.

REMOVAL OF FOREIGN BODIES FROM THE NOSE AND EAR.—Starrock (*Brit. Med. Jour.*, December 30, 1899,) recommends the following means of procedure: The presence and approximate situation of the foreign body having been ascertained, a piece of india rubber tubing rather less in diameter than an ordinary lead pencil, varying in length from one to three inches, and attached to the nozzle of a brass syringe, is introduced into the nostril or meatus, as the case may be, and brought into contact with the foreign body. The piston of the syringe is then pulled out for a sufficient distance to create a vacuum in the tubing, and thus draw the foreign body into, or against, its free end. The syringe is then withdrawn and with it the foreign body attached to the tubing. In some cases it has been found advantageous to dip the tubing into glycerin before inserting, in order to diminish the chances of air entering between the tubing and the foreign body.—*Medical Record.*

STATE MEDICINE.

STATE CONTROL OF CONSUMPTION.

REPORT OF THE COMMITTEE ON HYGIENE OF THE MEDICAL SOCIETY
OF THE STATE OF NEW YORK.¹

YOUR committee on hygiene would respectfully report :

Directed by our sense of responsibility, by the logic of the situation, as well as by the resolution of the society of last year, your committee has given particular consideration to the subject of state sanatoria for the cure and prevention of consumption.

We think it expedient to trace the growing interest which this society has taken in the subject of consumption, since the discovery of its infectious nature. The quickening influence of Koch's immortal discovery appears in this society's transactions for 1891, the scientific event of the meeting of that year being a Discussion on tuberculosis, including the following communications: Its history, by H. R. Hopkins; Its pathology and etiology, by Heneage Gibbs; tuberculous manifestations in the upper air tract and special treatment, by John O. Roe; Treatment, including prophylaxis as related to climate, by Samuel B. Ward; Treatment as related to therapeutics, by E. L. Shurly; Inoculations with Professor Koch's tuberculin, by A. Jacobi; On Koch's treatment in Mount Sinai and New York Polyclinic Hospitals, by H. N. Heineman.

In 1892, The danger of Milk from tuberculous cows, by Edward F. Brush.

In 1896, Shall the state undertake to restrict the spread of tuberculosis, by Jno. L. Heffron. This paper concludes as follows :

(1) Tuberculosis is an infectious and curable disease, capable of restriction; (2) that the state should compel the registration of every case of tubercular disease; (3) that circulars of information as to the nature, communicability and sanitary cure of tubercular disease should be sent to those afflicted with the disease, and to those attending them; (4) that instruction as to the nature of contagious and infectious diseases, and the practical methods of their control, should be given to all senior pupils in public grammar schools; (5) that all owners and trustees of places of public entertainment, including churches and schools, and all public carriers, should be required to prevent contamination of their halls and conveyances and to disinfect them; (6) that the hopelessly ignorant, wilfully careless and vicious, afflicted with tuberculosis should be isolated in special hospitals provided by the state.

1. Presented at the 94th Annual Meeting at Albany, January 30, 1900.

In 1897, The necessity of new methods of early diagnosis in tubercular disease to curative treatment, with remarks on treatment, by J. B. Ransom.

In 1898, What shall the state and county do for the consumptive? by John H. Pryor; The hygienic management of dairies, by E. F. Brush; The municipal control of milk supply in cities and villages, by W. H. Heath.

In 1899, The detection of tubercular infection in second-hand clothing, by William G. Bissell; Relations of the state to the consumptive from the standpoint of political economy, by George W. Brush; The relation of the state to the consumptive, with special reference to prevention and state care of the incipient consumptive by John H. Pryor.

The steadily developing interest in this important matter takes definite shape and precise and formal expression this year (1899) in the following resolutions, offered by Dr. George W. Brush, and unanimously adopted :

WHEREAS, It has been shown by the facts presented to this Society, and substantiated by statistics, that tuberculosis caused the death of more than thirteen thousand of the population of this State; and

WHEREAS, The researches of Science, and the results of experience, prove this disease to be a communicable one, and one easily preventable by proper knowledge on the part of the people; and

WHEREAS, There are no hospitals for the proper treatment of this disease, either State or Municipal; therefore,

Resolved, That the Medical Society of the State of New York urges upon the Legislature of New York State speedy legislation for the establishment of Sanatoria, where those afflicted with this disease may be treated, and of Sanitaria in the suburbs of large cities; and

Resolved, That the Committee on Legislation of this Society be directed to urge the passage of some measure by the present Legislature looking toward the establishment of a State Sanatorium.

Resolved, That these resolutions be printed, and a copy sent to the Governor, and to each member of the Legislature now in session.

At the same session the society adopted a resolution offered by Dr. Pryor, That the subject of state control for the prevention of tuberculosis be referred to the committee on hygiene.

Your committee on hygiene has the conviction that the principles involved in the question of the prevention of tuberculosis by the power and authority of the state are so plain, simple and recognised by all intelligent persons as to require neither argument nor discussion but only brief statement. The fundamental proposition is, that all

states have the right, and that all efficient states have the power to protect the lives and the property of the people. The enormous loss of life and destruction of property from tuberculosis, human, bovine and animal, is the energising fact which should call into action, give purpose, direction and test of this ability of the state to show its sovereignty.

Salus populi suprema lex.

In advancing from general considerations to those of greater particularity, in supporting the recommendation of the society for the establishment of state sanatoria for the treatment of cases of incipient consumption, we have the hopeful and comforting assurance that the practice is not visionary or experimental, but is sound and rational, and supported by the best judgment of the men of the widest experience, upon evidence which is absolutely demonstrative.

And further, that this practice has the additional claim to professional confidence, in that it rests upon the well known principles, early recognition, isolation and disinfection—that invincible triad, which in the warfare against the communicable diseases has won those glorious victories, the pride and boast of preventive medicine, the brightest page in all medical history.

And yet, still further, that the treatment used in these sanatoria, may calmly and confidently claim the attention of a sovereign state because of its ancient and honorable lineage, having come to us from Hippocrates, Areteus and Galen, with approbation of the great minds of medicine of each century and of all countries, and because of its simplicity, naturalness and efficiency.

Sanatoria for the treatment of consumptives are today in successful operation in almost every civilised country of the world—Austria, Italy and Poland each has one; Hungary, Belgium, Scotland, Ireland and Holland, each two; Denmark, four; Norway, five; Switzerland, eight; Russia, eleven; France, twenty-one; England, twenty-two, and Germany, forty-three.

The United States has thirty-three distributed as follows: Alabama, two; Colorado, three; Illinois, three; Maryland, one; Massachusetts, four; New Mexico, four; New York, ten; North Carolina, two; Pennsylvania, four, and in Ontario there are two. Those in this country are all private institutions, excepting one state sanatorium in Massachusetts.

Sanatoria for consumptives are not an experiment; they hold which these institutions have upon professional and popular confidence, is the result of critical observation upon their work for many years,

more than a third of a century; not in one locality alone where singular environment not to be repeated elsewhere may have been the factor in treatment, but in many localities with wide variations as to altitude, humidity, temperature, sunshine and winds; not upon cases of consumption from a single race alone, but upon consumptives of many races; not upon patients coming from a selected social class, but rather upon cases from all classes—high and low, rich and poor, vicious and worthy, peasant, serf and nobility.

Again, it is to be noted that the growth of these sanatoria has been slow. Brehmer opened his in 1859, from small beginnings; by reason of successful work they have grown in proportions and increased in numbers; planted by the courage and faith of individuals, they have won the confidence of the medical profession, the philanthropist, the community and at length that of the government of the state.

Medical opinion is notably conservative; the demonstration of the infectiousness, the communicability, the preventability of consumption was made nearly twenty years ago, nearly the span of a generation has passed since that revolutionising fact, and the revolution still tarries.

The watchman from the lookout reports that signal fires are burning here and there and there upon various mountain peaks; but in the valleys and plains the people still sleep—and year by year the tolling bells continue to number the enormous death-rate from consumption.

The discoveries of Koch and his supporting followers, is a trumpet call to action in the most beneficent and inspiring enterprise that ever engaged the energy, wisdom and enthusiasm of man—the abolition of the plague, the pestilence of human consumption.

To whom does this call come? To every man whose mind and opportunity has permitted him intelligently to study the literature of medicine upon this subject, and whose character is such as to enable him to engage in forceful action.

And who are they who will be found in opposition? All men who, refusing to accept the demonstrative labors of clinicians, bacteriologists and pathologists, hold that consumption is chiefly communicated by hereditary transmission, capable of stepping over one or more generations; all men whose love of ease is structural, whose desire to be known as fair-minded keeps them from having effective convictions, when convictions demand action; who hold it safer to stop at opinions, because opinions may be so balanced as not to dis-

turb conscience or interrupt repose; all impracticable men, who decline to consider or to discuss plans for the foundations of the house, the nature and proportions of its walls, until these peculiar ideas are accepted as to the color scheme for tinting the ceiling of the third story bedrooms; finally, all over-bred, thin blooded and burned-out men, whose courage, faith and effectiveness fully but fitly expresses itself in the pessimistic protest, "Am I my brother's keeper?"

In conclusion, your committee on hygiene emphatically and unreservedly commends the subject of state prevention of consumption, as the highest and most sacred privilege and obligation of the state.

That our increasing ability by means of bacteriological aid to make more accurate and early diagnosis of consumption, makes the already proven efficiency of treatment in sanatoria hopeful beyond expectation, and worthy the confidence and liberal support of the state.

That nature has, in a most generous measure, endowed the Empire State with those fortuitous conditions, virgin forests on foot-hills and mountain sides, streams of pure water, extended, uplifted and inspiring scenery, varieties of altitude with exposure to sun and with shelter from winds—all the provision of nature for nature's beneficent work. This constitutes an occasion, an opportunity, a responsibility which may no longer be disregarded; this demands that the Medical Society of the State of New York shall "speak to the people that they go forward."

We advise and recommend that this society cease not from its efforts until the State of New York affords to its incipient consumptives, the beneficent and hopeful treatment of state sanatoria.

(Signed) HENRY R. HOPKINS,
J. H. MOSHER,
M. A. VEEDER,
H. L. ELSNER,
GEORGE SEYMOUR.

TOOTHACHE.

R	Extract of opium	} āā 1	(gr. xv.)
	Powdered camphor		
	Balsam Peru		
	Mastic	2	(gr. xxx.)
	Chloroform	20	(3v.)

Wet a small piece of absorbent cotton with this solution and insert in cavity of tooth.—*L'Union Médicale*.

Correspondence.

DAVIS AND HAHNEMANN.

To the Editor :

Sir—We hear from a recent correspondent of one of our most influential metropolitan dailies, that a joint resolution of medical interest has recently passed both houses of Congress and received the signature of the president. This resolution grants permission for the erection of a monument in honor of Samuel Hahnemann at some suitable place in the City of Washington, D. C.

It appears that the committee having the matter in charge hope to expend upon the contemplated monument something like \$75,000. This seems to be the proper time again to call attention to the fact that this country is the only country in the world where such a proposal could seriously be made, or if made would have the most remote probability of realisation.

With us not only is the proposal obvious and in good taste, but the raising of the money should be an easy matter; in fact, to take less notice of the event, than by building a monument or endowing a hospital, would be for our homeopaths to convict themselves of inconsistency or of ingratitude. However, we who are not likely to be called upon to build this particular monument, might take the opportunity to build another—near at hand—perhaps not quite as large or expensive as the first, but one quite as appropriate and commemorative.

Should it come to pass that the capital of this country has the honor of perpetuating the work of Hahnemann, so far as granite and bronze can so perpetuate it, that honor will be due to the American Medical Association, and it would seem right and proper that that body should claim its own—by balancing the monument to the father of homeopathy, with one to the memory of the *late* N. S. Davis, father of the American Medical Association and foster-mother of homeopathy in America.

I have said that the Davis pile might be smaller than that of Hahnemann, but from this it should not be inferred that the event signalised is of lesser importance or significance; on the contrary, the Davis monument as a record of the greatest piece of malpractice in the history of medicine, and as a warning for all future genera-

tions, would have a value of the first order, easily entitling it to a prominent place in the capital of this nation.

HENRY R. HOPKINS,

433 Franklin Street.

BUFFALO, February 22, 1900.

SUBSTITUTION AND ADULTERATION.

To the Editor:

Sir.—We take the liberty of sending separately a booklet, which we commend to your careful consideration. Owing to the extensive demand for our preparations they are being largely counterfeited, substituted and adulterated, and this is not only an injustice to ourselves but an outrage upon the physician who relies upon the purity of the drugs prescribed. We would esteem it a great favor if you would comment upon this matter and caution physicians against counterfeit phenacetin, aristol, sulfonal, trional, and others of our preparations. All the products sold by us bear on the label the name of the

“FARBENFABRIKEN OF ELBERFELD CO., 40 STONE STREET, NEW YORK.”

We know that the majority of American physicians are making use of our preparations in their daily practice, and we shall be glad to avail ourselves of your kind offices by urging upon them the necessity of personally informing themselves whether the drug dispensed by their pharmacists is the genuine or some substituted or adulterated article. By doing so you will not only remedy a wrong committed against us, but also confer a great service upon the medical profession, which is so vitally interested in the purity of medicaments.

Yours very truly,

FARBENFABRIKEN OF ELBERFELD CO.

NEW YORK, January 31, 1900.

THE Pasteur Institute has declined a request from the Boers to send them a supply of antiplague serum, giving as a reason for this refusal that there was not enough serum in Paris to control an epidemic of the plague should it gain a footing in the city.—*Medical Age*.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges should be addressed to the editor: 284 FRANKLIN STREET, BUFFALO, N. Y.

VOL. XXXIX.—LV. MARCH, 1900.

No. 8.

THE MEDICAL SOCIETY OF THE STATE OF NEW YORK.

THE ninety-fourth annual meeting of this society was held in the city hall, Albany, January 30, 31 and February 1, 1900. From a scientific standpoint this meeting will take rank among the foremost in the history of the society, while in regard to attendance and *esprit de corps* it probably outclasses any meeting held in later years. On the first and second days the spacious council chamber was much too small for the large gathering. Some of this difficulty may be obviated in future if the treasurer, trunk line agent and credential committee were given a separate room. There are rooms nearby that could be utilised for this purpose, thereby relieving the meeting room of considerable pressure.

The president, Dr. Willis G. Macdonald, in his inaugural address referred to the general trend of medical affairs throughout the state, citing the satisfactory condition of higher medical education, the necessity for fixing more clearly the legal definition of the term "practice of medicine," so that all species of quackery may be controlled by our present medical practice act; the necessity for state control of tuberculosis; medical expert witnesses; the dangers of the measure before congress to regulate vivisection in the District of Columbia; and the reorganisation and increase of the medical corps of the army.

Dr. Macdonald's analysis of the differences between this society and the American Medical Association is so clear that we quote at length from the address:

The events leading to the schism now existing between the American Medical Association and the Medical Society of the State

of New York are too well understood to require any repetition in this body, nor would any reference to it be made but for the unofficial discussion by individual members of each society of a plan for reapproachment. The principles for which each faction in the profession of New York State has striven so strenuously and honestly for twenty years have, under the influence of medical progress, become practically identical. There lingers yet but the memories of thrusts received in heated if not acrimonious debate, and of wrongs perpetrated in defense of false notions. Personally, after a critical investigation, I can find no difference in the ethical behavior of members of the American Medical Association and that of members of the Medical Society of the State of New York. In fact, some very worthy and distinguished physicians are members of both and reflect equal credit upon each society. It has occurred to many of us that honesty and good manners are not matters for legislation or codes, but rather the results of home training and education, and that physicians are well bred and honest because of education rather than codes. The present medical law of the State of New York has done more to remove sects in medicine and improve the ethical and scientific standing of physicians than all the codes since Hippocrates. It is this law, possibly somewhat modified, with some additional safeguards, that is the code of ethics of the Medical Society of the State of New York, and practically unifies the profession of this state. If the present requirements for the degree of doctor of medicine in New York State will not guarantee the ethical behavior of the candidate, no code will. His state certificate is his authority and you can decline to receive, resolve and expel until red in the face, yet sit with the same man on an official board of health the next day.

The cases are isolated indeed where the code of the American Medical Association has been invoked to discipline a member. Its most frequent use has been its employment to keep members of this society from participating in the meetings of the American Medical Association. Recently this policy of conciliation has led to the acceptance of members of the Medical Society of the State of New York as members of the American Medical Association without asking any questions or having the gentleman recommended by another. The practice seems to me not only questionable but undignified. The differences which led to the disruption have disappeared. There is nothing but the echoes of strife and a few personal ambitions. A solution of the problem might be simple. Let the American Medical Association invite the Medical Society of the State of New York to send delegates whose credentials will be received and they be admitted through the same door that closed in the faces of that distinguished delegation of New York physicians at St. Paul. Let them come in the front door of the convention with equal rights for all; in this way, I believe, can our differences be settled with dignity, and the Association made what it is not now, the representative of the united medical profession of the United States.

The reports of committees elicited the fact that during the year much work had been done especially by the committees on by-laws, legislation, and hygiene, the report of the latter by the chairman, Dr. H. R. Hopkins, of Buffalo, being one of the most important and valuable made to the society in years. (See p. 602.)

The discussion on state care of tuberculous patients held in the assembly chamber, Tuesday evening, January 30th, was timely and must have shown the legislators present, that the society is earnest and serious in its advocacy of state care, and is ready to do its share in the alleviation and stamping out of a disease which kills 13,000 inhabitants of the Empire State every year. Interesting papers on this subject were read by Drs. Edward O. Otis and Vincent G. Bowditch, of Boston; Dr. George Blumer, of Albany; E. V. Stoddard, of Rochester; Edward R. Baldwin, of Saranac Lake, and on the part of the legislature by Senator Horace White, of Syracuse, and Assemblyman Otto Kelsey, of Geneseo. The discussion which followed was spirited, even at times full of ginger, and was participated in by Drs. John H. Pryor and Henry R. Hopkins, of Buffalo; Dr. Daniel Lewis, of New York; Dr. Nelson H. Henry, member of assembly, and others.

On Wednesday morning the members of the Society were given a trolley ride to the new Albany hospital where a clinical session was held under the guidance of Drs. Vander Veer and Macdonald, attending surgeons. Interesting surgical and gynecological cases were presented to the society and the members were conducted through the hospital building. Just before the close of the morning session the president delivered the annual address, taking for his subject, The relation of the clinical laboratory to modern surgery. Dr. Macdonald fully demonstrated the hold which bacteriology has upon modern surgical procedures. In the afternoon two addresses were delivered one by President Raymond, of Union University, on Education and the Practice of medicine, and one by the Rev. Dr. James M. Bulkley, of New York, On Rational Therapeutics versus Christian Science and similar superstitions. Both speakers were accorded a hearty welcome and an attentive hearing. Following the addresses the members were received by Governor Roosevelt in the executive chamber. The banquet which followed at 8 o'clock at the Ten Eyck was well attended and passed off to the greatest satisfaction of all present. Among the guests who attended were Senator Grady, of New York, Speaker Nixon, of Westfield and Assemblyman Kelsey, of Geneseo. Governor Roosevelt, unable to attend, was represented by his private secretary, Mr. Youngs.

The professional papers read were all of scientific worth and evinced a healthy spirit of study and investigation among the individual members. Buffalo and Western New York were well represented on the program and in the appointment of prominent places on the standing committees. A compliment paid the Buffalo delegation was that their speakers were equal if not superior to those of any other section of the state.

The business committee, under the able chairmanship of Dr. Wendell Phillips, of New York, deserves great credit for the excellent program presented and for the dexterous management with which it was so admirably dealt.

The election of officers occurred Thursday morning and resulted as follows: President, A. M. Phelps, of New York; vice-president, George Seymour, of Utica; secretary, Frederic Curtis, of Albany; treasurer, O. D. Ball, of Albany. The standing committees remain as before, with the exception of the addition of A. G. Root, of Albany, and A. E. Davis, of New York to the committee of arrangements; John H. Pryor, of Buffalo, to the committee on hygiene; T. Z. Jones, of Waterville, to the committee on ethics, and O. D. Ball, of Albany, to the committee on publication.

THE ALUMNI REUNION.

THE annual reception by the faculty to the alumni of the Medical Department of the University of Buffalo, a custom inaugurated last year, was held in the Alumni Hall of the University building, Thursday evening, February 22, 1900.

A large audience, generously besprinkled with ladies, graced the occasion, and the hall was appropriately decorated with patriotic emblems, reminding all that Washington's birthday had been appropriated by the faculty as permanent University day.

The dean of the faculty, Dr. M. D. Mann, was greeted with a round of applause when he took the chair and introduced the speaker of the evening, Dr. Frederick Peterson, '79, of New York, whose subject was Practical psychology. To say that it was interestingly instructive, even ably dealt with only echoes the universal opinion of everyone who heard the distinguished visitor. Dr. Peterson was invited to address the meeting last year, but was prevented by illness. He was, therefore, doubly greeted when he appeared with a robustness that was indicative of health, happiness, and longevity. His address will be published in an early issue of the JOURNAL.

The next feature of the evening was an attempt by Madame Bergman, of Buffalo, to demonstrate what is termed psychometry—whatever that may mean. At all events the famous “mind-reader” made sorry work of her attempt to measure the mentalities of several of her prominent auditors. It was easy to see how, by her jugglery with words and by making a few common-place guesses, more or less accurate, the superficially trained—even the superrefined—might be impressed with the wonderful “gifts” of such a person. It was a “demonstration” that in this instance failed to demonstrate.

Dr. Jason Parker, of Jamestown, who was billed to give a practical demonstration of hypnotism, was more successful. From a group of messenger boys hastily collected, he succeeded in apparently hypnotising a number of them. As an exhibition it was entertaining and succeeded in stimulating speculative thoughts in the minds of many present as to its applicability or utility. Dr. Parker received the applause of his audience many times during his entertaining demonstration.

Then came Prof. Gee Hart, of Buffalo, who delighted everybody by a sleight-of-hand performance. Gee-whiz! how he did fill the air with half-dollars, all of which rained into his own coffers. Some one suggested that he ought to get a permanent place as a passer of the plate in our most fashionable churches. Frequent applause testified to the interest in this part of the entertainment.

This closed the exercises of the evening in Alumni Hall, after which luncheon was served in the library where a pleasant hour was passed. The executive committee deserves credit for providing a unique and entertaining program, which was appreciated by the audience.

It is to be regretted that Governor Roosevelt, who was on a visit to Buffalo, could not attend. He signified his willingness to do so and say a few words, provided the Dean of the Saturn Club and the Colonel of the 65th Regiment, in whose hands he was for the evening would consent. But the JOURNAL is informed that neither Mr. Douglass nor Col. Welch—one or both—could be prevailed upon to relinquish their claims upon the Governor even for a few moments.

AT THE annual meeting of the regents of the University of the State of New York held at Albany, February 15, 1900, Mr. James Russell Parsons, Jr., was unanimously elected secretary, vice Melvil Dewey resigned. Mr. Parsons has been identified with the work of the regents office for a number of years. He was chiefly, the originator

of the uniform system of licensing teachers, which is one of the excellencies of the New York State system of education.

In a paper read before the New York State Teachers' Association, at Elizabethtown, in 1887, he outlined a plan which was subsequently adopted. His presentation of the case was so clear that Andrew S. Draper, then State Superintendent of Public Instruction, decided to adopt it, and called Mr. Parsons into his office to organise the work. The success with which it was carried out is well known to every one familiar with education in this state.

The following appointments were also made by the regents at this meeting: Drs. William Warren Potter, of Buffalo; William S. Ely, of Rochester, and Maurice J. Lewi, of New York, nominated by the State Medical Society, and Asa S. Couch, of Fredonia; J. Willis Candee, of Syracuse, and John M. Lee, of Rochester, nominated by the Homeopathic Society, were appointed state medical examiners, to succeed themselves for a term of three years, from August 1, 1900.

The regents approved the plan of establishing at Alfred University a school of instruction in the sciences and technology of clay working and ceramics.

THE excellent meeting of the Medical Society of the State of New York recently held, was quite fully reported in the leading weekly medical journals. The *Journal* of the American Medical Association, however, was conspicuously silent in regard to it.

If the association journal desires to establish and maintain a reputation as a representative medical journal it can do so by exhibiting a spirit of fairness toward all reputable medical societies; especially by presenting reports of state society meetings that are of scientific value.

A BILL restraining the practice of midwifery in the City of New York by others than legally authorised physicians was introduced by Senator Plunkett, February 19, 1900. It provides that before July 1st the Board of Health of New York City shall appoint a board of examiners in midwifery. The board is required to examine all candidates twenty-one years of age and of good moral character who may apply for license to practise midwifery, and upon the receipt of \$10, issue its certificate to those found qualified. Moneys thus collected are to be paid to the pension fund of the Department of Health of the city. Any person attempting to practise midwifery

without such certificate shall be guilty of a misdemeanor, punishable by a fine of not less than \$250 or more than \$500.

FROM the report of the State Board of Medical Examiners representing the medical Society of the State of New York for the examination held in September, 1899, we glean the following statistics :

Total number of candidates	162		
" " " successful candidates	127	78 $\frac{1}{2}$	per cent.
" " " unsuccessful "	35	21 $\frac{1}{2}$	" "
Rejected in anatomy	10	Rejected in one topic only . . .	15—15
" " physiology and hygiene.15		" " two topics.	7—14
" " chemistry	9	" " three "	4—12
" " surgery	12	" " four "	3—12
" " obstetrics	16	" " five "	1—5
" " pathology and diagnosis.22		" " six "	1—6
" " therapeutics, practice and materia medica	8	" " seven "	4—28
	92		92
Honor men			8
Highest general average			93 $\frac{1}{2}$

BACTERIA in books is a contagion danger which cannot be too often referred to—one that circulating libraries subjects the public to. It is a common thing for books from such libraries to find their way into sick rooms, especially into those occupied by chronic invalids. The State Board of Health of Michigan reports the death from consumption of twenty department clerks whose work had been in certain volumes of records. The books were found by examining bacteriologists to be full of tubercle bacilli, and it is believed that they became infected from a clerk who had consumption, and who was known to have habitually moistened his thumb with saliva when he turned a page.

SURGEON-GENERAL STERNBERG has announced that acting assistant surgeons are needed in the Philippines. Applicants who are accepted must pass physical and professional examinations before contracts will be given them. In his announcement General Sternberg makes plain his position that only professional qualifications and endorsement will aid an applicant. Political pressure and letters will injure a candidate. Men between 25 and 35 are preferred, and they must have had experience in hospital or private practice.

THE medical students of Ohio are spending valuable time lobbying for a bill now before the legislature to do away with state examinations for a license to practise, in so far as it applies to graduates of medical colleges in Ohio.

Now, when in the course of the spring examinations, some of the students fall by the wayside, they will complain bitterly of the faculty. Their own waste of time and negligence will be the cause; not the severity of examination.

THE *Sanitary Bulletin* of New Hampshire shows in its January number that consumption in that state is on the decrease. In 1884, the death-rate was 14 per cent. It had decreased to 10 per cent. in 1899; increased during the influenza epidemic of 1890 to 11.5 per cent.; then fell to 9.5 in 1892; rose to a little over 10 per cent. in the three years following, falling last year to an even 9 per cent. No attempt is made to explain the cause of the decrease.

THE annual bulletin of the State Board of Health for 1899 shows that during the year just passed there were 121,320 deaths, an increase of 850 over 1898, and 4,740 more than 1897. The death-rate per thousand was 17.3, the same average which has been maintained for 10 years. Infant mortality and diphtheria show a decrease.

IOWA has come into line and all graduates of medical colleges will have to go before an examining board for a license to practise.

PERSONAL.

DR. JOHN W. CAMERON, of Buffalo, has in connection with his general practice, opened an office at 46 W. Huron Street, for the treatment of diseases of the nose and throat. Hours: 12 to 3 p. m. His office for general practice is at his residence, 159 Woodlawn Avenue. Hours: 8 to 9 a. m. and 7 to 8 p. m.

DR. GEORGE S. PALMER, of 325 Franklin Street, Buffalo, who had but recently recovered from an illness in December, is reported ill with pneumonia. We trust he is in a fair way to recover with reasonable promptitude.

OBITUARY.

MARTHA T. HUNT, widow of the late Dr. Sanford B. Hunt, died in January at the home of her son, William T. Hunt, in Bernardsville, N. J. Mrs. Hunt was well known in Western New York years ago when she with her husband, Dr. Sanford B. Hunt, resided in Buffalo. She was an aunt to Frank Wood, of Batavia. Dr. Hunt it will be remembered was a former superintendent of the schools, editor of the *BUFFALO MEDICAL JOURNAL* and the city editor of the *Buffalo Commercial Advertiser*. He served in the Civil War as a surgeon of U. S. Volunteers and after the war wrote a history of the sanitary Commission's work. The burial of Mrs. Hunt took place at Forest Lawn, on Tuesday, January 30, 1900.

DR. ELIAS T. DORLAND, of Buffalo, died at his residence, 388 Elmwood Avenue, February 20, 1900, aged 67 years. He was born at Oswego, April 12, 1832, and his father Joseph Dorland, was a prominent physician in that region of the state. His ancestry were of the old Dutch stock, so famous in the Mohawk Valley, but in early life he came to Erie County, where his preliminary education was received in the public schools and at Springville Academy. He began his medical studies in Buffalo and attended the Medical Department of the University for a year. Afterward he continued his studies in and was graduated from the University of Michigan. After his graduation he was appointed resident physician at the Erie County Almshouse, which post he held for two years. After the expiration of his term of service he engaged in private practice at La Grangeville, Dutchess County, where he remained for twelve years. In 1866 he returned to Buffalo and continued to live here until his death. Dr. Dorland was one of the best known and most respected of the older physicians in Buffalo.

He was a member of the Medical Society of the County of Erie and served as its president in 1886; member of the Medical Union, of which also he had served as president; and a member of the New York State Medical Association. However, during late years, especially since his health began to fail, he has taken no active part in medical affairs, yet he has always maintained a deep interest in the guild and has been a loyal disciple of legitimate medicine.

In 1888, Dr. Dorland became a candidate for the Assembly and his successful opponent was William F. Sheehan, who became speaker, and afterward lieutenant governor. He was a mason, a

member of the American Legion of Honor, and a member of the Delaware Avenue Baptist Church.



ELIAS T. DORLAND, M.D.

In 1856, Dr. Dorland married Jane C. Congdon, of La Grangeville. He is survived by the widow and one son, an only child,

George E. Dorland. His funeral was largely attended Friday afternoon, February 23d, from the family home at No. 388 Elmwood Avenue, and the interment was at Forest Lawn.

The ceremony was conducted by the Rev. O. P. Gifford, assisted by the Rev. George Whitman. The honorary bearers were Drs. U. C. Lynde, John Hauenstein, Thomas Lothrop, C. C. Wyckoff, A. A. Hubbell, D. W. Harrington, H. R. Hopkins, A. H. Briggs, L. F. Boies, J. B. Coakley, W. G. Gregory and George E. Fell.

The active bearers were Clarence McGregor, N. Preston Taft, Fred K. Hiser, George W. Wilson, Charles C. White, George S. Buck, Joseph H. Wilson and William E. Broughton.

SOCIETY MEETINGS.

THE Medical Union of Buffalo, a private medical club, held its eighteenth annual banquet at the Genesee Hotel, the fourth Tuesday in January. Toasts were responded to as follows: By Dr. Roswell Park, on the State Laboratory; by Dr. J. C. Thompson, on the Medical Union; by Surgeon-Maj. A. H. Briggs, of the 65th Regiment, on The army; by Dr. Frederick Preiss, on The ladies, and by Dr. S. S. Green, on The new member.

The banquet committee was composed of Maj. A. H. Briggs, Dr. A. A. Hubbell, Dr. J. C. Thompson and Dr. Frederick Preiss.

The officers for the ensuing year are: Dr. J. C. Thompson, president; Dr. Herman Mynter, vice-president; Dr. Frederick Preiss secretary.

THE American Medico-Psychological Association will hold its annual meeting in Richmond, Va., May 8, 9, 10, 11, 1900—not May 1, 2, 3, 4, as heretofore announced. The change in date is made to enable members to attend the congress of American Physicians and Surgeons in Washington, May 1-4.

THE Buffalo Academy of Medicine held meetings during the month of February, 1900, as follows:

Section on Surgery.—Wednesday evening February 7th.
Program: Remarks on tubercular peritonitis, Gastrostomy, Acute appendicitis, Cure of malignant diseases by surgical intervention, Frederick S. Dennis.

Section on Ophthalmology, Otology and Laryngology.—Monday evening, February 12th. Program: Some improvement in operating x-ray apparatus, Elmer Starr; Radical operation for caries of middle ear, with exhibition of cases, George F. Cott; Report of a case of retropharyngeal abscess, Irving M. Snow.

Section on Medicine.—Tuesday evening, February 13th. Program: Dress reform, Matthew D. Mann; discussion by Hopkins, Bartow and Stockton.

Section on Pathology.—Tuesday evening, February 20. Program: Diseases of the skin, illustrated by stereopticon, Grover W. Wende; New method of analysis of stomach contents, A. L. Benedict.

Section on Obstetrics.—Tuesday evening, February 27th. Program: Indications for and selection of operation for uterine myomata, Edward J. Ill, of Newark N. J.

AN International Congress of Medical Electrology and Radiology will take place in Paris from the 27th of July to the 1st of August, 1900. All inquiries for further information should be forwarded to Professor E. Doumer, general secretary, 57 Rue Nicolas-Leblanc, Lille. Membership subscriptions are to be sent to Dr. Moutier, 11 Rue de Miromesnil, Paris.

THE regular monthly meeting of the Niagara Falls Academy of Medicine was held at the office of Dr. C. T. Leo-Wolf, Gluck Building, Monday, February 5, 1900, 8.30 p. m. Dr. Guillemont read a paper on Neurasthenia. The discussion was opened by Dr. McBlain.

Book Reviews.

SYSTEM OF DISEASES OF THE EYE. By American, British, Dutch, French, German and Spanish Authors. Edited by WILLIAM F. NORRIS, A. M., M. D., and CHARLES A. OLIVER, A. M., M. D., of Philadelphia. Pa., U. S. A. Volume IV. Motor Apparatus, Cornea, Lens, Refraction, Medical Ophthalmology. With fifty-one full-page plates and 211 text illustrations. 8vo, pp 950. Philadelphia and London: J. B. Lippincott Company. 1900.

The concluding volume of Norris and Oliver's "System of Diseases of the Eye," Vol IV., is now issued to the medical profession and signals the completion of a monumental work. There has been some delay in its execution and the original arrangement and assignment

of articles have been somewhat changed, but in its completed form every department of practical ophthalmology has been adequately treated, and each, for the most part, by a master of the subject in hand.

This volume has sixteen articles, instead of nine, as originally announced. The opening one is on Anomalies of the motor apparatus of the eye, by Edmund Landolt, of Paris, France, translated by C. W. Culver, of Albany, N.Y. This is a subject to which Dr. Landolt has given study and experimental work for years, and he has here, in space of 166 pages, crystalised his conclusions with such clearness and emphasis that, in reading the article, one feels himself in the presence of an authority, such as Dr. Landolt truly is. The first part of the article is devoted to paralysis of the motor muscles of the eye, and deals with its pathology, symptoms (including strabometry), clinical diagnosis, prognosis and treatment, both medical and surgical. The next part treats of nonparalytic strabismus, and enters fully into a consideration of all its varieties, their causation, symptoms, diagnosis and treatment, the latter including the use of spectacles, stereoscopic exercises and operative methods. Incidentally, an excellent review is given of the influence of the so-called "check" ligaments of the eye on the results of tenotomies and advancements. The article concludes with a section on nystagmus, as caused both by disease and occupation. The article is exceedingly interesting and meritorious.

The second article is on the diseases of the cornea, by J. P. Nuel, professor of ophthalmology in the University of Liège, Belgium, translated by Thomas H. Fenton, of Philadelphia, Pa. As the author truly says, "diseases of the cornea constitute one of the most important chapters of ophthalmology, this being due to their serious consequences in regard to sight and their frequency." In this article he has risen to the importance of the subject and has given us, in 86 pages, a complete survey of the diseases of the cornea, their pathology, symptoms, diagnosis and treatment. There are interspersed many beautiful engravings, which throw much light on their pathology. After a short introduction, the author deals with inflammation of the cornea, its general pathology, clinical examination, symptoms of keratitis and general therapeutics. Then he takes up the varieties of superficial keratitis, (*a*) superficial traumatic, (*b*) phlyctenular keratitis, (*c*) granular pannus, (*d*) acne of cornea, corneal herpes, and the like, (*e*) filamentary, (*f*) superficial punctate, (*g*) vesicular bullous and calcareous keratitis, their symptoms, pathology and treatment. Next are the forms of deep keratitis, which the author classified as (*a*) deep ulcerative and suppurative, and (*b*) deep nonsuppurative keratitis, the different forms of which, their symptoms, diagnosis and treatment, the author describes at length. The article concludes with sections on the sequelæ or consequences of keratitis, including cicatricial maculæ of the cornea, keratalgia, sclerosis of the cornea, arcus senilis, corneal staphyloma, corneal fistula, malformations of the cornea, neoplasms and tumors

of the cornea and corneal leprosy. This article also has great merit and deserves careful study.

The third article occupies 144 pages and is on Diseases of the lens, by William F. Norris, professor of ophthalmology in the University of Pennsylvania, of Philadelphia, Pa. It is an elaborate chapter on the crystalline lens and its diseases, is beautifully illustrated and is written in a clear and attractive style. The author covers the whole range of affections of the lens, including congenital, traumatic and spontaneous dislocations, malformations, aphakia, and cataract, its etiology, symptoms, diagnosis and treatment. The details of surgical procedures, are not as extended, probably, as would otherwise have been the case, had not these been entrusted to other hands in earlier volumes. But lacking these, the article does not fail to be of great importance, and in view of the author's judicial mind and great experience, his discussion on the comparative merits of the various methods of cataract extraction and on the complications attending operations and their management is invaluable. An excellent section is also included on the removal of the transparent lens for the cure of myopia.

In the next 80 pages, ametropia: its etiology, course and treatment is dealt with in a most clear and precise manner by Charles A. Oliver, of Philadelphia, Pa. The author is an expert refractionist, knows full well the effects of refractive errors upon the human economy, and in this chapter gives the reader the conclusions derived from his wide observation. They are in every way valid and practical.

The remainder of the work may be regarded as a treatise on medical ophthalmology. There are twelve articles as follows: Ocular lesions dependent upon diseases in the circulatory system, by O. Haab, professor of ophthalmology in the University of Zurich, Switzerland, translated by William Zantmayer, of Philadelphia. (58 pages); eye-diseases and eye symptoms in their relation to organic diseases of the brain and spinal cord, by Henry R. Swanzy, surgeon to the Royal Victoria Eye and Ear Hospital, Dublin, Ireland (106 pages); ocular lesions dependent upon disorders of the secretory and excretory organs, by J. B. Lawford, surgeon to the Royal London Ophthalmic Hospital, London, Eng. (42 pages); ocular lesions in variola, rubeola morbilli, scarlatina, erysipelas and diphtheritic, by John B. Story, surgeon to the Royal Victoria Eye and Ear Hospital, Dublin, Ireland (18 pages); ocular lesions of influenza, dysentery, cholera, malarial fever, dengue and yellow fever, by J. Santos-Fernandez, Havana, Cuba, translated by Daniel M. Guit  ras (22 pages); ocular manifestations of hysteria, by M. Parinaud, Paris, France, translated by Casey A. Wood, Chicago, Ill. (44 pages); eye-affections, due to Grave's disease and herpes zoster, by Jonathan Hutchinson, Jr., surgeon to the London Hospital, London, England (10 pages); motor changes in the ocular apparatus associated with functional neuroses, by Myles Standish, assistant to the chair of ophthalmology in Harvard University, Boston, Mass. (16 pages);

toxic amblyopias, by George E. de Schweinitz, professor of ophthalmology in the Jefferson Medical College, Philadelphia, Pa. (46 pages); the entozoa of the human eye, by Maximilian Salzmann, docent for ophthalmology at the University of Vienna, Austria, translated by H. V. Wurdemann, Milwaukee, Wis. (18 pages); simulated blindness, by S. Baudry, professor in the faculty of medicine in the University of Lille, France, translated by Frank W. Marlow, of Syracuse, N. Y. (47 pages); the ocular signs of death, by A. Gayet, professor of clinical ophthalmology to the faculty of medicine in the University of Lyons, France, translated by Edward C. Ellett, of Memphis, Tenn. (14 pages.)

This list of subjects and the eminence of the authors must suffice to indicate to the reader the ground covered and the high character of the contributions made. Not only does the specialist find, here, material of great importance to him, but it is of even greater value to the general practitioner and neurologist.

Taking the "system" as a whole, it seems to us scarcely possible to say too much in its praise. It might not be perfect—the arrangement of subjects might be improved the articles may be proportioned a little more evenly in accordance with their scientific and practical value; a general index to the whole work would increase its convenience for reference, but even with its minor defects, it has no equal in ophthalmological literature in the English language. As we have said before, the progressive ophthalmologist cannot afford to be without it, and it will prove an invaluable addition to every physician's library.

A. A. H.

THE SURGICAL DISEASES OF THE GENITO-URINARY TRACT, VENEREAL AND SEXUAL DISEASES. A Text Book for Students and Practitioners. By G. FRANK LYDSTON, M. D., Professor of the Surgical Diseases of the Genito-Urinary Organs and Syphilology in the Medical Department of the State University of Illinois; Professor of Criminal Anthropology in the Kent College of Law; Surgeon-in-Chief of the Genito-Urinary Department of the West-Side Dispensary; Fellow of the Chicago Academy of Medicine; Fellow of the American Academy of Political and Social Science; Delegate from the United States to the International Congress for the Prevention of Syphilis and the Venereal Diseases, held at Brussels, etc. Illustrated with 233 engravings. Pages xvi.—1024. Philadelphia, New York and Chicago: The F. A. Davis Co 1899.

When a lordly and egotistical gentleman with an M. D. hooked on the tail end of his name gets a job as lecturer in a medical college, his next step is to write a book, and of a truth his work tells just what he has read in other books and as a result, his literary contribution is one of those frappéd works of art which produce cross-eyes, and brain fag, leaving unpleasant memories in its trail. That is why medical literature to-day is a sort of a junk-bag of rewritten works and rehashed experiences; and that is why, when a man with a full and comprehensive knowledge of any special branch of medicine, sits down and tells all he knows of his subject, and gives his own

views, as well as the views of others, in a book which is well-written, intelligently builded, and tells things which are not generally known, he has done a creditable act and deserves commendation for it. That is why the practising physician should feel under personal obligation to Dr. Lydston. The publisher is a sort of intermediate means to a general end, yet the publishers of this book should be credited with exceptional good taste.

The author does not apologise for writing his book and he does not hesitate to say so either, which is a good sign at the outset. When a man apologises for writing a book, it means that he needs a brace; that he has a shaky confidence in his work. In this case, neither apology or explanation is needed. The book is quite able to stand on its merits, and stand firmly to. Besides, compared subject for subject, it out-classes most of the existing volumes in genito-urinary subjects and makes them look like primers; and, of a truth, many of them have that quaint a-b ab flavor of our careless childhood days.

There are ten parts in the treatise which Lydston has given us, and each one is a gem, no matter from whichever view point it is inspected. In part one Dr. Lydston very wisely takes up the general principles of genito-urinary, sexual and venereal pathology and therapeutics, and as wisely leaves it there, without trailing it through to the last chapter. Then comes nonvenereal diseases, diseases of the urethra and gonorrhea, chancroid, bubo and their complications, syphilis, diseases affecting sexual physiology, diseases of the urinary bladder, surgical affections of the kidney and ureter, and diseases of the testes and spermatic cord.

A strong claim of the book lies in the fact that each of these subjects is handled in a masterly fashion and completed in the section devoted to it. The operation procedures are presented in what might very properly be called a distinctively American manner; that is by adequately describing the methods advised, and going into detail as regards treatment. This is in strong contrast to some recent foreign works on genito-urinary subjects and monographic contributions on special branches, as for instance the still new publication, *Die Krankheiten der Prostata*, by Dr. A. Van Frisch, Professor of Surgery in Vienna, who bows low before the shrine of Battini and, giving his opinion of radical measures in prostatectomy without supporting them, calmly neglects to give any intelligible description of operative procedures. In his work, Dr. Lydston has made himself so clear as regards operative work that, after a careful and conscientious study of the book, any senior medical student of the normal type should feel a deep sense of confidence in his ability to make a creditable showing in doing much of the work laid down.

This book gives brilliant promise of further work in this field by the distinguished author, and its later issues, for assuredly there will be other editions, will keep it up to the standard of a masterpiece of genito-urinary literature. The author very gracefully and most appropriately dedicates his work to Dr. Fessenden N. Otis.

THE MODERN TREATMENT OF WOUNDS. By JOHN E. SUMMERS, JR., M. D., Surgeon-in-Chief to the Clarkson Medical Hospital; Attending Surgeon Douglas County Hospital; formerly Professor of the Principles and Practice of Surgery and Clinical Surgery, Omaha Medical College; ex-President of the Western Surgical and Gynecological Association, the Nebraska State Medical Society and the Omaha Medical Society. Medical Publishing Co., Omaha, 1899. Copyrighted, 1899, by J. E. Summers, Jr., M. D. Press of State Journal, Lincoln, Neb.

This volume came hustling in out of the west, unheralded, unknown and unlooked for. It came as a shock. It was a shock because all told, between the prettily-tinted green cloth covers, there are 149 pages, and that includes everything from soup to nuts; everything from preface to index; from the first bright word of joyous greeting to the last sobbing-note of a sad good-bye. For my part, I was generously inclined at first, for here, I thought, is a man who has condensed his work and put the modern treatment of wounds into small space. I skimmed through the volume. That was all I could stand; and of a truth was hardly necessary to skim it even once to get the cream. I expected a scintillating gem and I got one of those end-man diamonds which one sees in minstrel shows and vaudeville acts. Bill Nye used to tell a story of a funeral he once attended. It seems that a gentleman, by name McGuire, had died in the usual course of events. His fellow-laborers and fellow members of the beneficiary association, of which he was a shining light, held a memorial service before the body was taken to the church. The chief-speaker was one of those oratorically inclined gentlemen whose poetic license goes untagged. In the course of his remarks, he said that the deceased was a useful member of the society. A saddened and sleepy brother, who had been drowning his sorrow, woke up in time to hear the words and broke in with: "Useful? Use? of what use? He's a dead one." But to return to the book. It is nicely gotten out. The State Journal Press does good printing. The binder knew his business, and they certainly have got a good photo-engraving plant in Omaha where it was published, or in Lincoln where it was printed, for the half-tones, while they are not instructive in any sense are very excellent exhibitions of the mechanics of latter-day illustrating.

As to the vitals of the book, a passing word will suffice. In the 149 pages, everything is covered—general and special surgery from the fascinating field of brain lesions, down to thoracic-tinkering, still further down to the abdomen, that fertile pasture whereof it has been said by the specialist of a big city that "they open up the belly and go in with a milking stool, sit down and tinker around." And still on, on, on, on with an excelsior sort of a rush, the author crashes into amputations, sprains and what not, with now and then a dash into a sea of pus, and a plunge into the horrors of tetanus and "septic blood poisoning."

Then, too, there is an exposé of bacteriology, in which we are given a new classification under the heading of "Divisions of micro-organisms," as follows: (1) "micrococci, which are cells, either

round or oval;" (2) "bacilli, which are rod-shaped cells," and (3) "bacteria, which may be rod-shaped; . . . also oval."

I read the book, but I did it as a duty and some duties are so disagreeable that they have a leathery taste in one's mouth. As I have said the printing, the binding and the pictures are good. As for the book as a book, well, read that McGuire story again!

N. W. W.

THE INTERNATIONAL TEXT-BOOK OF SURGERY. By American and British Authors. Edited by J. COLLINS WARREN, M. D., LL. D., Professor of Surgery in Harvard Medical School; Surgeon to the Massachusetts General Hospital; and A. PEARCE GOULD, M. S., F. R. C. S., Surgeon to Middlesex Hospital, and Teacher of Operative Surgery at Middlesex Hospital Medical School; Member of the Court of Examiners of the Royal College of Surgeons, England. Volume I. General and Operative Surgery. With 458 illustrations in the text, and nine full-page plates in colors. Philadelphia: W. B. Saunders. 1899. [Price, \$5.00.]

The wealth of surgical literature that has been added to so much in recent years, is greatly increased by the publication of this treatise. This first volume, at all events, gives token of the fact that a splendid contribution is making to our surgical libraries.

The field covered by this volume, general and operative surgery, affords an opportunity for the editors to command the pens of some of the ablest and most practical surgeons. For example, they have laid under contribution such men as Harold C. Ernst, who writes of surgical bacteriology; Richard C. Cabot, who contributes a chapter on the surgical pathology of the blood; George Ryerson Fowler, whose chapter on wounds and contusions, burns and scalds, effects of lightning, shock, fat embolism, and repair of special tissues, is most practical; Weller Van Hook, with two chapters, one on constitutional reactions to wounds and their infections, and another on hydrophobia, anthrax, glands, etc., which are instructive; Walter George Spencer, who writes on gangrene with precision; I. H. Cameron, on surgical tuberculosis; and three chapters by the senior editor. These comprise the contributors to general surgery in this volume.

In operative surgery the writers are McBurney, Warren Da Costa, Gay, Pfaff and Burns, Bland Sutton, Pilcher and Warbasse, Makins, Cheyne, Willard, Rushton Parker, Bradford and Lothrop, Monks, Tiffany, Golding, Bird, Richardson, Burrill, and the late John B. Hamiltop.

McBurney's chapter, on the technic of aseptic surgery, is a complete exposition of the subject by a practical surgeon and is clearly, even fascinatingly, presented. It should be carefully studied by every young practitioner who essays to do the surgery that comes within his grasp. A complement to this chapter is one on Anesthetics and surgical anesthesia, by George W. Gay, Franz Pfaff and T. G. A. Burns. The two important preliminaries to all good surgery are skilful administration of the anesthetic, and the intelligent, thorough application of the principles of asepsis.

These are the two contributions of the XIXth. century to the surgical art that have done more than all others in all time to make surgery a humane, life-saving, and health restoring art. Gay and his colleagues have risen to the occasion in their contribution, and have given us a practical chapter on anesthesia and anesthetics.

Bone surgery is considered in several chapters—one on fractures, by Lewis S. Pilcher; one on injuries of the joints and dislocations, by George Henry Makins; one on dislocations of the hip, by J. Collins Warren; one on diseases of the bones by Watson Cheyne; one on diseases of the joints, by De Forest Willard, and one on diseases of special joints (orthopedic surgery) by Rushton Parker. Besides these there are other chapters that involve bone surgery to a greater or less extent, such as one on congenital dislocation of the hip, flat-foot and club-foot, by E. H. Bradford and Howard Lothrop; one on cranial surgery, by L. McLane Tiffany; and one on surgery of the spine, by Golding Bird.

Other chapters requiring special mention are one on hyperemia, inflammation, etc., and one on suppuration, abscess, etc., by J. Collins Warren; one on minor surgery, by John Chalmers DaCosta; one on tumors, by J. Bland Sutton; and one on surgery of the peripheral nerves, by Maurice H. Richardson.

Several other important topics are ably presented by competent men. The scope and method of the treatise are commendable, and the work when completed will constitute a noteworthy addition to the surgeon's library.

A MANUAL OF SURGICAL TREATMENT. By W. WATSON CHEYNE, M. B., F. R. C. S., F. R. S., Professor of Surgery in King's College, London; Surgeon to King's College Hospital, etc., and F. F. BURGHARD, M. D. and M. S. (Lond.). F. R. C. S., Teacher of Practical Surgery in King's College, London; Surgeon to King's College Hospital, etc. Volume II. 382 pages, with 141 illustrations. Philadelphia and New York: Lea Brothers & Co. 1900

If one has ever had the extreme good fortune to eat a Chinese dinner—a real Chinese dinner, not a luncheon, then one has some sort of an idea of some of the sensations of enjoyment and surprise experienced in receiving the second volume of this manual of surgical treatment, by Cheyne and Burghard. Chinese dinners are famous for their surprises, and this work is full of anticipation which is outstripped by realisation, giving it a sort of a friendly feeling. There is an air of confidence in the method of handling subjects which, to say the least, is grateful and comfortable in these days of high falutive rhetorical strain. In the second volume the authors have kept close to their original plan of simplicity, intelligibility and common sense, and there is in no place in the book any effort to display excessive and dispiriting surgical knowledge.

The student in going over this work instinctively feels that it is the product of men who know what they are writing; that it is all practical, that the procedures are proper and beyond the experi-

mental stage and that there need be not the slightest hesitation in following the advice given in any case under consideration. It is all so plain, so exquisitely descriptive, and, again, one is told not only how to do things, but why and when.

Surely it is the exemplification of modern text-book writing, and better medicine, more intelligible treatment will be taught and infinitely better results will be achieved, when there is published a series of small volumes, such as these are in make-up, dealing with the practice of medicine in much the same way as these authors deal with surgery. Lydston has done genito-urinary work in one volume in this style; a style that impresses upon the casual reader the fact that there is much more in genito-urinary work than writing prescriptions to combat Neisser's low-bred and very common organism, or the passing of a sound.

In the recent volume of Cheyne and Burghard's work there is taken up the surgical affection of the tissues, including the skin and subcutaneous tissues, the nails, the lymphatic vessels and glands, the fasciæ bursæ, muscles, tendons and tendon sheaths, nerves, veins arteries and deformities.

In the preface the authors speak of some hypercritical reviewer's complaint that they had dealt with treatment independently of pathology and symptoms. The fault is not with the authors, but with the reviewer who went out of his way to air himself, for is not this a manual of surgical treatment, and did not the authors say in the preface in the first volume: "For the practitioner, on the other hand, who is already acquainted with these points (pathology, symptomatology and diagnosis) the great essential is full and detailed information as to the best methods of treatment?"

Again, as in the first volume, in the book just issued the text is made clearer, and the treatment made more intelligible, by the use of excellent illustrations. There is nothing left to the imagination; it is all taught. Not satisfied with saying that sutures should be placed thus and so, cuts are used to illustrate the manner and method of the placing. There is so little to criticise in the second volume that it is not worth while to say anything regarding the shortcomings of the book; they are so infinitesimal. The volume bears out all the promise of a great work given by the first, and adds interest and whets the appetite for those which are to follow. Provided the pace set by volumes I. and II. is kept up, the finished work will constitute one of the most valuable contributions to surgical literature published in years—valuable because it is good, plain, common-sense, every-day treatment, without any frills. N. W. W.

THE JOHNS HOPKINS HOSPITAL REPORTS. Volume VII., Nos. 5-6-7 8-9. Hernia. by JOSEPH C. BLOODGOOD, M. D. Baltimore: The Johns Hopkins Press. 1899.

This volume contains the report of 459 operations for hernia with special consideration of 268 cases which were treated by the Halsted method, and also of the transplantation of the rectus muscle in

certain cases of inguinal hernia in which the conjoined tendon was found obliterated. It is a magnificent treatise on the subject which reflects great credit upon the surgical skill of Halsted and his assistants and their accuracy in recording the histories and final results of their cases. There is no branch of the subject, from the practical or rather surgical aspect, which has not been thoroughly discussed.

The excision of the veins of the cord to reduce its bulk and further guard against recurrence; the use of silver wire and foil; the effect of rubber gloves in reducing the percentage of suppurating cases to 1.8 per cent.; a new operation for varicocele, castration and hydrocele by excision in the groin; the transplantation of the rectus muscles in cases where the palpable portion of the conjoined tendon is obliterated; atrophy of testes; operation under cocaine anesthesia; the study of the ultimate results in which the two chief causes of recurrence are found to be obliteration of the conjoined tendon and transplantation in toto of the cord, without excision of the veins in the upper angle of the wound; the acute infections and other complications following operation; and the ultimate health of the patient, are among the many and varied aspects of the operative treatment of hernia which are so carefully and scientifically treated in this volume.

It would far exceed the limits of space allowable to adequately review this work. The illustrations are admirable in clearness. In fact, a surgeon familiar with the anatomy of the inguinal region could closely imitate the Halsted operation by a study of the plates alone. It is a valuable record which every surgeon should possess and familiarise himself with.

J. P.

LOVE AND ITS AFFINITIES. By GEORGE F. BUTLER, M. D., Professor of Materia Medica and Clinical Medicine in the College of Physicians and Surgeons, Medical Department of the University of Illinois. Author of "Materia, Therapeutics and Pharmacology," etc. Beautiful octavo volume, cloth, gilt top, 134 pages, with photogravure frontispiece, "Cupids Sharpening Their Arrows," by Raphael Mengs. Chicago: G. P. Engelhard & Co., Publishers.

The affinities of love which Dr. Butler discusses are lust and religion. To the thoughtful man or woman accustomed to studying the motives of mankind, the association is not startling. In the last analysis motive resolves itself into one or the other of the fundamental impulses, self-preservation or the preservation of the species; and while at first it seems a far cry from the baseness of the depraved sexual instinct to the sublime heights of religion, the relation between the two is not so distant. Both have their origin in the same passion.

Phallicism, the almost universal sex-worship of primitive peoples, shows the alliance between religion and the sexual instinct, an alliance seen, but scarcely ever appreciated, in the greater religious receptivity in early life when the sexual powers are maturing.

Permit the reviewer to suggest for the greater religious devotion of women a reason which seems not to have occurred to the author. Love,

the gratification of the sexual instinct, demands of woman, has demanded of the brute mother for long ages before man appeared on the globe, self-sacrifice. For woman self-sacrifice is a corollary of love. Does she not turn to the church because the self-abnegation, which all religion enjoins, affords an outlet to the altruistic instinct denied its natural expression in motherhood?

Of those whose work does or should acquaint them with the elemental passions of mankind, the physician, who sees too often the grosser side of the sexual instinct, needs to have shown him, as Dr. Butler has done, the reverse of the picture, which deals with love in its higher forms. Too prone is he to regard the base and animal as the only manifestations of the all-pervading and all-compelling passion. On the other hand, there are those by whom far more knowledge of this fundamental impulse and its affinities might well be possessed—the professional teacher and the preacher. The one has the guiding of the young through the critical periods of youth and early manhood, maidenhood and young womanhood; the other, engaged with the ideals of life is not infrequently unacquainted with the real man and the instincts and passions which make him what he is. Let the physician read that he may not wholly lose faith in human nature; the priest and teacher, that they may understand more thoroughly how closely allied in man are the worst and the best.

Dr. Butler has avoided the pathological. Throughout the volume he has quoted widely from the literature of all ages in proof and illustration of his statements, and while laying no claim to originality, he presents a difficult subject with delicacy and beauty.

A TEXT-BOOK OF THE PRACTICE OF MEDICINE. By JAMES M. ANDERS, M. D., Ph. D., LL. D., Professor of the Practice of Medicine and of Clinical Medicine in the Medico-Chirurgical College, Philadelphia; Attending Physician to the Medico-Chirurgical and Samaritan Hospitals, Philadelphia, etc. Octavo, pp 1292. Illustrated. Third edition, revised. Philadelphia: W. B. Saunders, 925 Walnut street. 1899.

It is a genuine pleasure to present repeated notices of a book like this one, for it means that it is appreciated by physicians and students of medicine. Especially does it mean in this instance that teachers have recognised its superior merits, have recommended to their classes, and have adopted it in their schools as a leading text-book.

In former reviews we have discussed the general make-up of the treatise, and many of its salient features; in this we need only speak of changes. This edition exhibits the results of careful revision. The first part, entirely devoted to the consideration of infectious diseases, has felt the effect of the revisers hand in a marked degree, owing to the fact that our knowledge of these diseases has advanced considerably of late. It is important—most important—that text-books on practice should keep well to the fore in this department, and should note every advancement in a group of diseases that so

intimately relates not only to public health, but to private welfare. This author has demonstrated his appreciation of this assertion, by bringing his book forward to the immediate present in its consideration of infectious diseases.

Again has the author kept pace with events through the introduction of a group of new subjects, the rewriting of several topics of great importance, and the extensive review of many articles; for example, typhoid and yellow fevers, lobar pneumonia, tuberculosis, etc., etc., all of which combine to present strong evidence of the high value of the treatise.

The book is essentially clinical in character, as might be anticipated when the eminence of the author as a clinical teacher and observer is recalled. This distinctly adds to the value of the work as a text-book and especially does it enhance its quality as a reference volume for younger physicians and family doctors.

Anders has had the good fortune to group many excellent qualities in his book, one of the most important being the manner of its arrangement. It differs from most others in its make-up and is excelled by none in the fashion of its typography, or in the division and subdivision of its subjects.

Finally, this treatise is commended as one of the strongest text-books on the practice of medicine yet offered to the profession or undergraduate.

DISEASES OF CHILDREN. A manual for students and practitioners By GEORGE M. TUTTLE, M. D., Attending Physician to St. Luke's Hospital, Martha Parson's Hospital for Children, and Bethesda Foundling Asylum, St. Louis. Illustrated with five plates in colors, and monochrome. 12mo, pp. 386. Philadelphia and New York: Lea Brothers & Co., 1899.

To attempt to condense into a small volume the essentials of such a subject as the diseases of children is a difficult task. The author in this case, however, has succeeded admirably. The physiology of infancy and the artificial feeding of the infant are dealt with at some length and in a satisfactory manner. The treatment of the various topics discussed is necessarily brief, yet nothing important is omitted, and for the beginner in the study of pediatrics it is an excellent work.

The mechanical part of the book, which is one of Lea's series of pocket text-books edited by Bern B. Gallaudet, leaves nothing to be desired.

M. J. F.

GENERAL AND LOCAL ANESTHESIA. By AIME PAUL HEINECK, M. D., Clinical Instructor in Genito-Urinary Diseases, College of Physicians and Surgeons, Chicago; Clinical Instructor in Gynecology, Chicago Clinical School; Clinical Instructor in Surgery, Northwestern University Woman's Medical College. 124 pages. Chicago: G. P. Engelhard & Co., Publishers, 358-362 Dearborn street.

In this eminently practical monograph the author has succeeded in detailing very plainly the rules pertaining to the giving of general and local anesthetics. Ether and chloroform constitute the first topic,

the selection of the anesthetic, precautions before operation, symptoms, during and after the anesthetic state. The latter half of the book is devoted to the various ways of producing local anesthesia by refrigeration, by cocaine and by Schleich's infiltration method. Cocaine especially is dwelt upon; its use in the various specialties and the manner of injection in distinct operation; for example, circumcision, are given in full.

The monograph will prove valuable to the student and surgeon alike, for the English is simple, all theories and historical data are omitted and only such details as experience has proved important, are given. The book is printed and bound attractively.

PHYSIOLOGY: A MANUAL FOR STUDENTS AND PRACTITIONERS. By HOWARD D. COLLINS, M. D., Assistant to the Attending Surgeon of the Roosevelt Hospital; Assistant Demonstrator of Anatomy, College of Physicians and Surgeons (Columbia University), New York, and WM. H. ROCKWELL, JR., M. D., Assistant Demonstrator of Anatomy, College of Physicians and Surgeons (Columbia University), N. Y.; Member of Association of American Anatomists. Series edited by BERN B. GALLAUDET, M. D., Demonstrator of Anatomy and Instructor in Surgery, College of Physicians and Surgeons, Columbia University, New York; Visiting Surgeon, Bellevue Hospital, New York. Illustrated with 153 engravings. 12mo, pp. 323. Philadelphia and New York: Lea Brothers & Co. 1899.

This volume belongs in Lea's series of pocket text-books, mention of which has been made previously in the JOURNAL. It holds a place intermediate between the quiz-compend and the treatise on physiology. It is well printed and illustrated and gives as full an account of the subjects covered in the term physiology, as is to be expected in a work of its size and character. The style of the authors has the merit of clearness, and the arrangement of matter is good. The medical student will undoubtedly find it useful and superintendents of hospital training schools, when looking for a book to put into the hands of pupil nurses will do well to examine this little volume.

M. J. F.

AN ATLAS OF THE BACTERIA PATHOGENIC IN MAN. With descriptions of their Morphology and Modes of Microscopic Examination. By SAMUEL C. SHATTUCK, F. R. C. S., Joint Lecturer on Pathology and Bacteriology at St. Thomas's Medical School, London; Pathological Curator of the Museum of the Royal College of Surgeons, London. With an introductory chapter on Bacteriology: Its Practical Value to the General Practitioner. By W. WAYNE BABCOCK, M. D., Pathologist to the Kensington Hospital for Women; Clinical Pathologist to the Medico-Chirurgical Hospital, etc. Sixteen full-page colored plates. New York: E. B. Treat & Co. 1899.

This atlas was originally published in the International Medical Annual in 1898 and 1899 and evoked the admiration of those familiar with bacteriology, that the author and publisher deemed it wise to issue it in book form.

The plates of high artistic merit illustrate the appearance under the microscope of the bacteria pathogenic in the human subject.

All are in colors, handsomely executed with descriptive text, succinct and practical, thus giving a sufficiently complete work on the subject to meet ordinary requirements. An introductory chapter on the practical value of bacteriology to the general practitioner adds to the value of the work.

W. C. K.

A TEXT-BOOK OF MATERIA MEDICA, THERAPEUTICS AND PHARMACOLOGY. By GEORGE FRANK BUTLER, Ph. G., M. D., Professor of Materia Medica and of Clinical Medicine in the College of Physicians and Surgeons, Medical Department, University of Illinois, Chicago; Professor of General Medicine and Diseases of the Digestive System, Chicago Clinical School; Attending Physician to Cook County Hospital, etc., etc. Third edition, thoroughly revised. Handsome 8vo volume of 874 pages. Illustrated. Philadelphia: W. B. Saunders. 1899.

The appearance of several editions of Dr. Butler's book in rapid succession gives evidence of its practicability, and its value in this respect is of a kind that commands the appreciation not only of practitioners but of teachers and students. The author recognises the emphatic need of today in the line of his work—namely, a more thorough knowledge of drugs, their properties, preparation and powers.

These rudiments of pharmacology are systematically arranged for convenient study, separate sections being given to pharmaceutical preparations and processes of their manufacture and to prescription writing. Then in the text of the main part of the work incompatibles, synergists, doses, physiological action and poisonous effects are discussed in connection with the individual drugs and their uses.

We do not deplore the absence of the customary list of diseases and remedies applicable thereto, which forms so extensive a part of many books on therapeutics, but which is a veritable *pons asinorum* to superficial students and practitioners. Whatever value such a list would possess is compensated for in the book before us by a clinical index which directs to the application of any drug in the various diseases. We desire to commend the author's adherence to pharmacopeial titles and definitions throughout work and the constant recognition of the resources furnished, in the direction of medicinal combinations, by the U. S. Pharmacopeia and the National Formulary. We could wish, however, that he had gone a step further and in the expression of doses given the metric system first place, recognising the old system only parenthetically.

On the whole, the volume furnishes one of our most complete and practical text-books on materia medica.

E. H. L.

ESSENTIALS OF PHYSICAL DIAGNOSIS OF THE THORAX. By ARTHUR M. CORWIN, A. M., M. D., Instructor of Physical Diagnosis at Rush Medical College; Attending Physician to the Central Free Dispensary, etc. Third edition, revised and enlarged. Philadelphia: W. B. Saunders. 1899.

This little work on physical diagnosis of the thorax was designed primarily by Dr. Corwin to meet the wants of his own classes. So

well presented was the subject that a second and now a third edition followed. The book is an excellent one for the student, the text being so arranged that the eye at once catches the salient points which are thus easier held in memory. We commend the volume to those looking for a brief and concisely written student's manual on this subject.

M. J. F.

WARNER'S POCKET MEDICAL DICTIONARY OF TODAY. Comprising pronunciation and definition of 10,000 essential words and terms used in medicine and associated sciences, and tables of arteries, nerves, muscles, etc. Arranged for convenient reference. By WILLIAM R. WARNER. Copyright. Philadelphia: William R. Warner & Co. 1899.

Wm. R. Warner & Co., present the second edition of their pocket medical dictionary, a little volume of convenient size and of much practical value. Pronunciation, as well as the meaning of upwards of 10,000 medical terms is given, those very common words and phrases whose definition would but encumber the book without adding anything to the knowledge of the student, being omitted.

M. J. F.

A LABORATORY MANUAL OF PHYSIOLOGICAL CHEMISTRY. By ELBERT W. ROCKWOOD, B. S., M. D., Professor of Chemistry and Toxicology in the University of Iowa. Illustrated with one colored plate and three plates of microscopic preparations, $5\frac{1}{4} \times 7\frac{1}{4}$ inches. Pages viii.—204. Philadelphia: The F. A. Davis Co., Publishers, 1914-16 Cherry St. 1899.

This book has been prepared with a view to aid the student in laboratory work, by imparting knowledge through the observation of the student himself. In addition to the directions for experimental work, brief explanation of facts are given. With some acquaintance with general chemistry and chemical manipulation, the student will obtain much aid from this brochure. The section devoted to the urine is especially to be commended and will be found a useful guide in conducting researches in diseases of the urinary tract.

BOOKS RECEIVED.

Report of the Commissioner of Education for the Year 1897-98. Volume 2, containing parts II. and III. 8vo, pp 2640. Washington: Government Printing Office. 1899.

A Practical Treatise on Diseases of the Skin. For the use of Students and Practitioners. By James Nevins Hyde, A. M., M. D., Professor of Dermatology and Venereal Diseases in Rush Medical College, Chicago. New (fifth) edition. In one octavo volume of 866 pages, with 111 engravings and 24 full-page plates, eight of which are colored. Cloth, \$4.50, net; leather, \$5.50, net. Philadelphia: Lea Brothers & Co. 1900.

The American Year-Book of Medicine and Surgery. Edited by George M. Gould, M. D. In two handsome octavo volumes. Profusely illustrated. Cloth, \$3.00 per volume, net; half morocco, \$3.75 per volume, net. Philadelphia: W. B. Saunders, Publisher, 925 Walnut St. 1900.

The Principles of Treatment and Their Application to the Practice of Medicine By J. Mitchell Bruce, M. D., F. R. C. P., Lecturer on the Practice of Medicine in the Charing-Cross Hospital, London; Examiner in Medicine, Royal College of Physicians, London. Revised to conform with the U. S. Pharmacopeia by E. Q. Thornton, M. D., Jefferson Medical College, Philadelphia. In one octavo volume of 625 pages. Cloth, \$3.75. net. Philadelphia: Lea Brothers & Co. 1900.

Transactions of the Mississippi Valley Medical Association. Twenty-fifth Annual Session, held at Chicago, Ill., October 3, 4, 5 and 6, 1899. Volume I. Edited by Henry E. Tuley, M. D., Secretary, Louisville, Ky. 8vo. pp. 474. Louisville, Ky.: The Courier-Journal Print. 1900.

Potts's Nervous and Mental Diseases. A Pocket Text-Book of Nervous and Mental Diseases. By Charles S. Potts, M. D., Instructor in Electro-Therapeutics and Nervous Diseases in the University of Pennsylvania, Philadelphia. In one handsome 12mo volume of 442 pages, with 88 illustrations. Cloth, \$1.75 net; Flexible Red Leather, \$2.25, net. Philadelphia and New York: Lea Brothers & Co. February, 1900.

Crockett's Gynecology. A Pocket Text-Book of Diseases of Women. By Montgomery A. Crockett, A. B., M. D., Adjunct Professor of Obstetrics and Clinical Gynecology, Medical Department of the University of Buffalo, N. Y. In one handsome 12mo volume of 368 pages, with 107 illustrations. Cloth, \$1.50, net; Flexible Red Leather, \$2.00, net. Philadelphia and New York: Lea Brothers & Co. February, 1900.

Proceedings of the American Medico-Psychological Association at the Fifty-fifth Annual Meeting, held at New York City, May 23, 24, 25 and 26, 1899. Edited by C. B. Burr, M. D., Secretary. Published by the Association. 1900.

LITERARY NOTES.

THE annual report of the Children's Hospital of Buffalo, N. Y., for the year ending October, 1899, as been received. The perusal of the report will afford pleasure to anyone interested in this beautiful children's charity. There are now eleven free beds in the hospital, and thirty-eight children, nearly one-third of the whole number cared for during the year, received free treatment. Only six deaths occurred, a remarkably low death-rate when one reads the list of diseases treated during the year.

THE New York *Lancet*, with which is incorporated the *Archives of Gynecology, Obstetrics and Pediatrics* has passed into the editorial management of Dr. Walter B. Chase, and his son, Dr. Carroll Chase. This must prove advantageous to the *Lancet*, as the editorial experience of Dr. Chase, Sr., and the energy of Dr. Chase, Jr., will infuse an activity into the journal that will interest its readers. We extend our cordial greetings to the editors with best wishes for their individual and journalistic prosperity.

THE *Regular Medical Visitor* is the name of a new medical periodical from St. Louis, Mo., the first number of which bears the date of January 15, 1900. It is edited by Dr. George Howard Thompson, who announces that the *Visitor* has "come to stay"—a circumstance that will be devoutly wished by all its St. Louis neighbors, we have no doubt. At all events we extend cordial New Year greetings to the *Visitor* with the hope that its fondest hopes may be realised.

THE *Stylus*, is the name of another new medical monthly from St. Louis, that has put in an appearance since the beginning of the year. It is edited by Dr. William Porter, who is a veteran journalist, assisted by Dr. Robert M. Ross. The first issue bears the date of February, 1900, and certainly bears the impress of experience and ability in its make-up and material. Our most cordial good wishes are presented to *The Stylus*.

DR. GEORGE F. BUTLER, of Chicago, formerly editor of *The Medical Standard*, has assumed editorial management of a new journal to be called *The Doctors' Magazine*. Dr. Butler is an author of repute, and we are publishing in this issue of the JOURNAL reviews of some of his recent books. We cannot doubt that his experience will assure success to his new enterpriser.

MESSRS. WILLIAM WOOD & CO. have the manuscripts of numbers of books submitted to them, which, while not calculated to find extensive sale to the medical profession generally, are of great interest and importance to specialists and practitioners working along the same lines. Their arrangements with foreign publishers also frequently include similar books. It is purposed to offer for sale very small editions of some of these, in certain cases not exceeding one hundred copies in all. After these are disposed of, they can no longer fill orders for them. Such books will be announced hereafter as "*Limited Edition*," and prompt application will be necessary to obtain copies.

This enterprising house also announces the publication of a new book entitled, *Venereal diseases: their complications and sequelæ*, by Edward L. Keyes, A. M., M. D., late professor of dermatology and genito-urinary surgery in the Bellevue Hospital Medical College; consulting surgeon to Bellevue Hospital, etc., etc., and Charles H. Chetwood, M. D., professor of genito-urinary surgery in the New

York Polyclinic College and Hospital; visiting surgeon to Bellevue Hospital, etc.

This book is divided into two parts: Part I., Acute and chronic urethritis; complications and sequelæ. Part II., chancroid and syphilis; embodying the senior author's original teaching concerning these diseases. A valuable chapter on nervous syphilis has been contributed by Dr. Pearce Bailey, consulting neurologist at St. Luke's Hospital.

It is an octavo volume, 364 pages, beautifully illustrated by eight full page plates, in black and colors, and one hundred and seven engravings. Bound in muslin. Price, \$2.75 net.

The Mechanics of Surgery is the title of a brochure issued by Charles Truax, of Chicago, head of the well-known instrument house of Truax, Greene & Co. The pamphlet contains excerpts from a book recently issued by Mr. Traux with the same title, as well as press and individual notices of the work. We printed an extended review of *The Mechanics of Surgery* in the issue of the JOURNAL for December, 1899, page 391, to which the attention of our readers is invited. The book is a unique and helpful presentation of and important adjunct to the work of the surgeon. Its price is \$3.00 net.

ITEMS.

THE SANDER PRIZE.—THE following rules for competition for the gold medal of the value of \$100, dedicated by Mr. Enno Sander, of St. Louis, for the best paper on Military surgery, presented at the annual meeting of the Association of Military Surgeons of the United States, are promulgated:

1. Competition to be open to all members of the association.
2. Each competitor shall send three copies of his essay, in a sealed envelope, to the secretary, Lieut-Col. Charles Adams, Central Music Hall, Chicago, Ill., on or before April 15, 1900. The essay must be strictly anonymous, but the author shall adopt some *nom de plume* and sign the same to the essay, followed by a figure corresponding with the number of pages of the manuscript. A sealed envelope bearing the *nom de plume* on the outside, and enclosing full name and address shall accompany the essay. This envelope to be opened in the meeting of the association after the decision of the committee on the prize essay has been received.

3. The committee will designate the essay worthy of the prize, and also in their order of merit those deserving of honorable mention. Should the committee deem proper, it may recommend neither prize nor honorable mention.

4. The successful paper shall be published in the Transactions of the Association.

The committee is composed as follows: Col. N. Senn, Surgeon-General, I. N. G.; Major A. C. Girard, Surgeon, U. S. A.; Captain George W. Woods, Medical Director, U. S. N.

AN excursion to the Paris Exposition and the International Medical Congress for physicians and their families is in contemplation under charge of Mr. Chas. Wood Fassett, of St. Joseph, Mo. It appears upon information from headquarters, recently given out, that the boat is nearly filled, there being but a few more choice berths unsold. As soon as the last stateroom is sold, the books will be closed. Steamer rates have advanced on all other lines. A deposit of \$25.00 should be sent at once. Those who find they will be unable to undertake the trip will have no difficulty in disposing of their berths, and money will be refunded.

Physicians desiring to prolong their stay in Paris and London, or to take side trips, may secure passage immediately after the meeting of the American Medical Association, at Atlantic City, on the American Liner, "St. Louis," which sails June 13th, joining the main party either in London or Paris. A few select berths are unsold but application must be made at once to secure them. This trip, thirty-eight days, all expenses, can be made for \$285.00. Return tickets good for one year. International Medical Congress opens August 9th, in Paris.

Remittances may be made direct to steamship agent, Mr. F. C. Clark, 111 Broadway, New York City, stating which party you wish to join, or to Charles Wood Fassett, in care Tootle, Lemon & Co., Bankers, St. Joseph, Mo., who will receipt for all remittances, and forward same to Mr. Clark.

MESSRS. FAIRCHILD BROTHERS & FOSTER, of New York, have placed us under obligations for a most useful desk diary for the year 1900, which this well-known firm has recently published. Besides a calendar and schedule of postage rates, it contains blank pages for memoranda for every day in the year upon each of which is printed, on the lower margin, some facts and general information relating to the digestive ferments and other preparations manufactured in the laboratories of this famed house. The book is printed on good paper, bound in strong muslin, and will be forwarded by the publishers upon application.

BUFFALO MEDICAL JOURNAL.

VOL. XXXIX.—LV.

APRIL, 1900.

No. 9.

Original Communications.

PRACTICAL PSYCHOLOGY.¹

By FREDERICK PETERSON, M. D. (Class of '79), of New York,

President of the New York Neurological Society; president of the board of managers of the Craig Colony for Epileptics; chief of clinic, department for nervous and mental diseases,
Columbia University.

YOUR committee which has honored me, and made me grateful by this kind invitation to address you, made the condition that I talk to you about practical psychology. At first I demurred to this, for the subject suggested a little story which Matthew Arnold related in a lecture of his delivered in Buffalo some seventeen years ago. An English school boy being requested to give a practical explanation of the line, "Canst thou administer to a mind diseased," wrote "Can you give medicine to a lunatic." It seemed to me that this sort of practical psychology, therapeutics for the insane, would be a melancholy subject for me to discuss at a gathering of this kind, and I should have rejected it altogether had not the thought subsequently occurred to me that practical psychology after all includes far more than this, indeed almost the whole region of human culture.

Practical psychology is the dominant feature of modern education. It has to do with all the problems of sociology. It is the ruling spirit of the politician. There is no limit to its expansion, its imperialism, in the entire domain of human knowledge and intercourse. Therefore I shall take as my text only that small part of practical psychology with which the physician has to do—that which relates to the interpretation of facts in his science, and which is so deeply interwoven with the phenomena brought before his eye, such as clinical and pathological experience, the tricks of spiritualism, mind-reading and legerde-

¹ Address to the Alumni Association of the University of Buffalo, February 22, 1900.

main, the manifestations of hypnotism, dreams and telepathy, and the fatuities of christian science, faith-cure, theosophy, osteopathy and other forms of quackery. Are these things real or are they not? Do we believe them or do we not? Be they actual and credible, upon what do we found our judgment? What is the evidence?

All of these questions must be decided from the standpoint of the value of Human Evidence, and I shall take as my text in this brief address this paramount subject of Human Evidence. It would take too much time and more of the critical faculty than is at my disposition to properly set this subject before you, but at least I may briefly outline what to me are the main conditions modifying the value of evidence and vitiating our inferences and judgments. With things that are known and accepted by all mankind we have none of this difficulty. The accumulated experience of ages has thoroughly sifted the evidence, so that we know the earth to be round, the moon to be a satellite, mathematics to be an exact science, death to be our human lot. But as to the things that are unknown, we stand in the shadows upon shifting sands. We listen to the sanguine or fraudulent assertions of others, our senses are full of illusions, our emotions lead us astray, our longings and preconceptions seize any propitious circumstance with which to prop and stay our wandering minds.

Now what are some of the sources of error in the critical balancing of testimony presented to us? There are two obviously important factors in an inquiry of this nature: first, the quality of the phenomenon observed, and secondly the character and quality of the observer. The things with which we have to deal belong to the domain of the unknown. They are things concerning some of which we are able to grasp certain dim outlines, certain foreshadowings, certain penumbæ, so to say, of the truth, but concerning many of which we can have only surmise, hypotheses, theories, superstitions or unsupported beliefs. They form the "million acres of our ignorance." The observer himself is hampered by the defective and illusory evidence of his more or less imperfect senses, by undisciplined intellect, by the perversions of his hazy memories, by the limitations of his knowledge and experience, by the modifying influences of his emotions, and less often perhaps by a tendency to deliberate deception and misrepresentation of the matters under consideration. We are constantly confronted in our study and practice of medicine with the mass of our ignorance of the things yet to be known and with the defects and limitations of the students of these things. Despite this, however, we are constantly wresting from nature her marvelous secrets and surpris-

ing and uplifting the world with our discoveries. It is interesting to examine the practical psychology involved in the elucidation and acceptance of any new fact or problem.

Take any example. Take for instance the matter of cerebral localisation. Compare the knowledge of cerebral localisation in a Hippocrates and in a Horsley, and contemplate the shifting mass of ignorance concerning this subject during those twenty-three centuries. Think of the thousand preposterous assertions concerning the brain, the thousand absurdities current, the thousand errors promulgated, the work of the multitude of quacks, philosophers, psychologists, physicians, anatomists, physiologists and pathologists, during all those centuries before what seem to us now such simple truths won the acceptance of the modern world! And with regard to the things yet to be discovered in this great unseen and unknown universe about us, the same process of shifting the good from the bad evidence goes ever on in the self same way. The quacks and empirics are with us still, making all sorts of fraudulent claims and ridiculous assertions in relation to phrenology, christian science, faith-cure, osteopathy, and quack medicines of all kinds. We have them in our own profession, adventurers, seekers after notoriety and fortune, exploiting some panacea or other, fake cures for consumption and inebriety, pelvic operations for the cure of psychoses, eye muscle-cutting for the relief of epilepsy, nose-boring for any and every disorder, and so on through the whole category of human diseases. On a plane but little higher than this we have a class of pseudo-scientists, men who occupy a reputable position in the profession and seek by every means to enhance their reputations, even by deliberate falsifications of their observations, proclaiming new discoveries in pathology and therapeutics which they know to be untrue, but which they feel may pass scrutiny for a long time, because of the obscurity of our scientific data and the intricacies of the problems they pretend to solve. Then we come to the body of real workers in every field of medical science, men filled with that eager enthusiasm and burning love of truth which leads them to immolate themselves upon the best of sacrificial altars, that of human progress. It is chiefly upon the errors of these that I wish to dwell, to point out the conditions which often vitiate their evidence.

In the first place there are our imperfect senses; those narrow and dim avenues through which we gain all our knowledge of the outer world. How often have we followed fatuous fires through those shadowy vistas that led not anywhere, how often been misled by

illusions that promised so much and redeemed so little. The facts of yesterday become the artefacts of today. The seeming conquerors of the present are overthrown tomorrow. There is always that process of sifting, sifting evidence going on through years and years. Once it was common belief that the neurones were joined together, as are our electric batteries and wires. The work of many laboratories had led to that belief. Suddenly a solitary student announces that the neurones are independent organs, having no direct continuity, functioning only through process contiguity. Again we have the corroborative work of numerous good men in the same field. Then a new arbitrator passes judgment on the labors of his predecessors and reasserts the old idea of continuity, and is in turn supported by the valuable testimony of still others. And now, at this present moment, through the sifting process that has gone on, we are in the position to assume that perhaps both presentations are correct, that there are some neurones that are independent and some which are not. But what a vast amount of work this conclusion represents, what repetitions of experiment and observation, what faults in the eye, what errors of judgment, what warping influences of personal idiosyncrasy!

It is not alone the illusions to which our defective senses are so subject that lead to mistakes and misinterpretations; but there are even greater sources of error in the psychical processes connected with these faulty senses. There are few observers who possess that disciplined intellect, that even temperament, that calm judgment, so necessary to the critical and unprejudiced examination of phenomena. Many medical men have limited horizons, owing to a lack of thorough training and to a want of familiarity with the ascertained data of the many cognate sciences with which their own lines of research are more or less correlated. They are, in other words, deficient in their store of experiences. Another defect lies in want of the imaginative faculty. In studying the unknown we may be handicapped by an inability to conceive of the qualities and character of the phenomena that are hidden, by an unconsciousness of the very existence of such phenomena. It is almost proverbial that most discoveries are stumbled upon, after having stared us in the face for ages. They were always before our eyes, but we had not the imagination to conceive of them. What for instance could be more astonishing to most of us than to be able to talk a thousand miles or more with a friend, or to scrutinise a man's bones with our eyes, not only through his flesh but through his clothes and through a door? While most discoveries are stumbled upon, others are made by scientists who

have the conceptive faculty to such a degree that their findings are the result of their brilliant mental prescience and clairvoyance.

Still another fallacy in our interpretation of phenomena is due to the vitiating influence of the emotions upon the judgment. A man's character has been said to be the sum of his ethical emotions, and his judgment of natural phenomena, and especially of what we may term preternatural phenomena, is almost sure to be biased in some degree by the feelings of fear, pleasure, reverence, awe, sympathy or antipathy which they inspire, and these feelings of his are a reflex of the sum of his emotional sensations experienced throughout his whole life in relation to events, customs, religious views and all sorts of convictions and beliefs. Another and very intangible source of error in evidence, particularly in regard to occult phenomena, has been described as the "instinctive tendency of the imagination to dramatic unity and completeness." With less felicity it has also been termed the "mania for finishing." A pathologist begins a piece of difficult work and in his eagerness and impatience to bring it to a successful issue, he unconsciously perverts the evidence presented to fit some preconceived theory or idea, shaping it into a harmonious unity.

There is one profession—that of the reporter—in which a premium is set upon the cultivation of this particular instinct. In that branch of newspaper work, he is most successful who can convert his observations of common place incidents and events into the best "story." In other words, the natural unconscious sophistication of facts by the human mind to make a dramatic unity, is developed in the reporter to the highest degree of conscious artifice. He is no longer, at least in our large cities, a reporter, but a writer of stories, and his work should be judged from the standpoint of art. A comparison of the "stories" in various newspapers founded upon observation of the same incidents, but described by different artists, is instructive, especially to those who are interested in practical psychology; and I mention this here because of the importance of recognising the existence in all of us of this instinct, and because we have an example in this single calling of high tribute paid to the evolution of a cerebral center which in most other callings were better in a state of latency or atrophy. The man who relates a dream, or some extraordinary psychical experience, generally errs in the same way; he unconsciously sophisticates the record from that "instinctive tendency of the imagination to dramatic unity and completeness." And it has actually been demonstrated by the Society for Psychical Research that almost as fixed as law is the tendency, with the lapse of time and the gathering

mists of memory, to a greater and greater dramatic exaggeration of marvelous psychic experience through which the narrator has passed.

So to sum up, the chief sources of error in evidence as to even tangible and palpable phenomena and facts, such as those of physiology, cytology, diagnosis, expert testimony, pathology, therapeutics, statistics and the like, are very great and far-reaching. They consist of (1) deliberate fraud, as in all species of quackery; (2) wilful perversion of facts by pseudo-scientists; (3) objective errors through limitation and defect of the senses; (4) limited horizon through defective experience and education; (5) insufficiency of the imaginative faculty; (6) vitiation of evidence under influence of the emotions; (7) the innate tendency of the mind to completeness, to dramatic unity in unraveling a mystery.

Here are seven kinds of fallacy with which we are confronted in dealings with material objective things in our own science of medicine, and I have purposely given these details to draw a contrast in the matter of evidence between highly objective natural phenomena and the phenomena which we know as supernatural, intangible, and immaterial. How vastly greater must be the resources of error in our investigation of these most elusive and mysterious subjects! What a wide and tempting field for fraud and imposture! What a fruitful Cagliostroian garden for cultivation by the pseudo-scientists. In this marvelous domain, under coercion by fraud, illusion and hallucination, by intellectual poverty, by feeble judgment and defective memory, by stress and duress of the emotions, by hereditary and pre-conceived beliefs and superstitions and by that instinctive trend to dramatic finish, the tactile nerve-end, tongue, nose, eye and ear, so inefficient in the material world, may be made to touch the intangible, taste and smell the impalpable, see the imperceptible and hear the inaudible.

You will observe at this meeting tonight the strange deception of the senses which can be practised by the expert in legerdemain. We enjoy these illusions of the senses and we recognise them as such, but in the uninitiated they might well inspire emotions of awe or terror. In an unintelligent age, not so very long ago, people were hanged and burned for performances less mysterious. Many of us possibly, if we encountered these illusions in our every-day life, instead of witnessing them upon the stage, might readily develop morbid superstitions concerning them. As it is they are terrorless, because the prestidigitateurs make a point of advertising their illusions as tricks done for our entertainment.

The mind-reader really does no more, though sometimes it is claimed for him that he is able to actually read your mind. The mind-reader generally differs from the expert in legerdemain only in his pretensions. The one claims ability to read the mind which of course he is unable to do, and the other is an honest deceiver, asking only admiration for the cleverness and artistic merits of his jugglery. Mind-reading, so-called, is a combination of guess work, muscle-reading and jugglery, and these matters are so trite that I need not dwell upon them here.

Hypnotism is a curious phenomenon not yet fully explicable to any of us, though there is less mystery in it than is popularly supposed by the laity. The subject is gradually going through the process of sifting of evidence hereinbefore described. The popular idea that the hypnotic eye is possessed by only a few chosen individuals, that crimes may be committed by the subject under the influence of another, that almost any disease may be cured by this measure, that subjects may be hypnotised at a distance by telepathic influence, and so on, are simply fallacies, given currency by the sophisticated "stories" of the daily press and by the pamphlets of pseudo-scientists.

This brings me to the subject of telepathy, or the influence of mind on mind at a distance, a matter which contains considerable evidence among intelligent people. The hypothesis of telepathy was first broached as an explanation of the experience of many persons as to warning dreams, apparitions of absent friends and relatives who were dying, presentiments of visits, remarkable sympathies between people, apparently spontaneous expression of similar thoughts by individuals or peoples widely separated, and the like. If telepathy be true, our knowledge of physical conditions at the present day, such as modes of motion, interatomic ether, intermolecular modulations, the sympathetic vibration of tuning forks and strings, etc., affords an easy scientific explanation of the phenomena. But have we evidence of the existence of telepathy sufficient to satisfy the most critical scientific mind, evidence as conclusive as that which leads us to accept as facts the common events of our every-day life, and the rarer facts accumulated by science in every field?

I have been at some pains to go over the evidence which has been gradually accumulated in relation to telepathy, and have even done some experimental work in this line. For instance, some years ago, Mr. Kennelly, then chief electrician of the Edison laboratory, and myself, made some experiments at that laboratory with a view to determining whether currents of varying vibration in the neighborhood of

the head, might not be made by induction to set up molecular vibrations in the brain and thus rouse different thought processes into action. We each of us placed our head inside of huge coils of wire through which powerful alternating currents were passed with high frequency. The result was negative. Some further experiments upon the heads of lower animals made at the same time, however, demonstrated that the brain is so wonderfully insulated by the skull and scalp, which act so well as short circuits, that probably the vibrations we employed upon ourselves did not reach our brains at all. Hence our negative results in these interesting experiments did not in any way invalidate the telepathic hypothesis. Now then, as to the evidence afforded by hallucinatory presentiments in dreams, these I take it are too vague and shadowy to appeal to any but superstitious and emotional people.

I think the best minds in the Society for Psychical Research do not attach much if any importance to dream-warnings. Dreams are so indefinite, so fleeting, so difficult to remember accurately, even if written down at once upon awaking, which is seldom the case; and if not immediately fixed upon paper, dreams are so plastic that they become extraordinarily modified by unconscious sophistication and dramatisation in direct ratio to the lapse of time between the event and its recital. Hallucinatory presentiments in the waking state or supposedly in the waking state are believed to have more value in this connection. But I have read many well authenticated examples of this kind, and it seems to me they cannot run the gauntlet of unbiased critical judgment. Incidents of this sort related to me by friends I regretfully reject, since the most conscientious people are unwittingly subject to the sources of error I have mentioned, illusory memories and the uncontrollable tendency to dramatic recreation of long-past events. But accounts written at or near the occurrence and corroborated by a creditable witness are more deserving of examination. These, however, are very rare, so rare indeed that chance coincidence may well serve to clear up their apparent mystery. It is possible that these so-called hallucinatory presentiments in the waking state are really subconscious, the mind lapsing momentarily to a lower plane of consciousness, just as dreams are believed to occur, not in deep sleep, but on the borderlands between sleep and waking. It would not be unnatural to suppose that during such a moment of obscured consciousness, the fact or voice of a dear relative or friend, so closely woven into all our subliminal associations, might rise like reality into that twilight of the mind. This indeed might happen not infrequently

and all the more surely if there lurked any vague easily suggestible uneasiness in those subconscious levels, because of the illness of the absent one. Many inconsequential mirages of this nature pass unnoticed but immediately upon the occurrence of a catastrophe the presentiment is recalled, definitely linked with the event by an unconscious perversion of the sequences and facts, and welded into a stronger and stronger catenation with the lapse of time. I believe therefore that we have as yet no satisfactory evidence of the existence of telepathy, although I should be the last to deny the possibility of this or even greater marvels. We should keep our minds hospitably open to receive and welcome any strange guest bearing the proper credentials.

The word clairvoyance has a respectable significance, clear-seeing, intuitive sagacity—but it has also a savor of humbug and trickery. The astronomer is a true clairvoyant who foresees transits, eclipses and the paths of comets. The signal officer is a clairvoyant as regards storms and good weather. They see clearly what will happen through the sagacious eye of science. But the clairvoyance of the transmedium and the crystal visionary is a mixture of fraud, suggestion, autosuggestion and coincidence.

Spiritualism, or as my friend Prof. Hyslop, of Columbia, now terms it, spiritism, is not only a distinctively American invention, but Western New York may claim what honor is to be associated with its origin, for Rochester produced it in 1848. The tenets of this cult spread very rapidly, and curiously enough, Spain and the United States stand foremost among the nations where it has found most proselytes—a singular bond of sympathy. Spain publishes forty, and the United States about thirty periodicals dealing with spiritualistic philosophy and phenomena. These two countries together publish seven-tenths of the spiritualistic periodicals of the whole world. Why should two countries so radically different in point of age, freedom of opinion and diffusion of culture, be united by such a bond? Superstition and ignorance will immediately be named as the chief factors in Spain—why not also here? A man may have common sense and a considerable store of philosophy without knowing how to read and write. The converse of this is also true. He may read and write very well and be minus sense and philosophy. We may point proudly to our statistics of education as judged by the general knowledge of the three R's, but I fear that our plane of sense and philosophy coincides very closely with that of Spain. There may be other factors at work to keep us at this present level, but they are obscure. How

else are we able to explain the enormous prevalence of spiritualism, theosophy, christian science, faith cure, factories of patent medicines and medical quackeries of all kinds? But I must not longer take up your time with these interesting phases of practical psychology. Few, if any of you present, would ask for an analysis of the evidence in relation to these subjects, having already determined by yourselves its triviality and inconclusiveness.

If I have made clear the seven sources of fallacy in evidence related to the material things with which our profession has to deal, it is readily seen that the sources of error in evidence connected with the immaterial world must be almost seventy times seven. But we shall continue the process of sifting and sifting evidence through the centuries and ever increasing the great pile of frauds laid bare, lies discovered, illusions corrected and delusions rejected, and at last when the pile is heaped high, what a bonfire of newspapers, pamphlets, books and apparatus shall be lighted by our descendents to celebrate their escape from the bondage of ignorance and superstition!

4 WEST FIFTIETH STREET.

RATIONAL STEPS IN THE SCIENTIFIC TREATMENT OF NERVOUS PROSTRATION, HEADACHE AND NEURALGIA.

By AMBROSE L. RANNEY, M. D., New York City.

“**N**ONE are so blind as those who won't see!” There are many in the medical profession, to-day as in the past, who stick to antiquated methods; who unfortunately regard all innovations as either nonsensical or useless; who scoff at all facts which conflict with their pet theories and methods; who refuse to even try what they have groundless prejudices against; who talk learnedly in societies and elsewhere about the results of investigations by themselves or others that can never have been made intelligently, if at all; and who write as fluently as they talk derogatory to an important field in medicine that they have little if any technical knowledge of, no sympathy with, no experience in, and whose results (in such hands) must of necessity have been unsatisfactory.

Everyone who has worked intelligently and faithfully for years in the scientific study of the eye-muscles knows today that the opinion of any one on their anomalies must be of little value—no matter how

great the reputation of the man—if he has neither the “phorometer” nor “tropometer” as a part of his office equipment, nor any records of the power of each individual muscle and the arcs-of-rotation of each eye upward, downward, inward and outward.

There is indisputable proof today that “crossed” eye toward the nose or temple—chiefly the former—may in some cases be made parallel with its fellow by simply lowering or raising one or both eyes. Such cases were not understood five years ago. They tend today to explain why many operations for “squint” have, in the past, caused bad over corrections or yielded negative results. It is known today that the muscle at fault in “cross-eye” is not always the muscle that to the casual observer appears to restrict the natural movements of the eye. The cutting of the wrong muscle may sometimes give the operator who follows antiquated methods of research before operation—and the patient as well—subsequent food for reflection and a vast amount of regret.

The sad results, viewed from the standpoint of suffering humanity, that are entailed by indifference and prejudice in men of scientific reputation cannot be estimated.

By giving expression to others of their opinion concerning what they have not properly and patiently investigated themselves or will not see, thousands of sufferers are doomed to a life of misery.

Such patients naturally believe that abnormal eye factors in their own case have been sought for by the latest methods and found to be absent by one who stands high in his profession. They quote to their friends the positive assertions of him—whom they believe infallible—that eye muscles are not worth investigating;” that “all deviating tendencies of the eyes are invariably due to errors of refraction;” that “Javal’s instrument has been used, and that settles the question forever;” and other similar expressions, indicative either of inexperience, bigotry, or prejudice, that too often come to my own ears.

Perhaps the most common experience that I personally encounter in my office, is to have patients tell me that either their doctor or some oculist whom they have consulted has said to them that “their eye trouble is the result of their physical weakness and not a cause; that the relief of the eye trouble can have nothing to do with their recovery and that all statements to the contrary are not supported by facts.”

It is for the purpose of demonstrating the counter-proposition; of showing that “eye-strain” may indirectly be the cause of obscure disease and not its result; and of turning, if possible, the channel

of medical thought so as to benefit suffering humanity, that I deem it wise to raise my voice again in defence of a method of treatment that will often accomplish what drugs will not, and that is based upon science rather than therapeutical speculation and empiricism.

From my late work, entitled, *Eye-Strain in Health and Disease*, F. A. Davis Co., publishers, Philadelphia, 1897, I quote the following paragraphs relative to the effect of a leakage of nerve-force upon the predisposition of certain persons to obscure diseases:

"We are all exposed—from birth until death—to the presence of certain atmospheric germs or microbes. Many forms of these are constantly being introduced into our bodies through the air, our food, and the water we drink. Constantly, through life, are certain toxic materials also being formed within the human body and eliminated through the kidney, liver, intestinal tract, etc.

In some subjects, when the most favorable conditions for their retention, absorption, and multiplication exist, do these microbes and toxic substances hasten the dissolution of life; while in others that possess a reactive power capable of combating the elements of disease, life goes on in spite of microbes with its normal growth and decay.

We are forced to admit that seeds sown by the farmer as well as those of the weed-carried and distributed by the wind flourish best in soil that is properly prepared for their reception and development. Is it therefore irrational to assert that any of the underlying causes of nervous debility, any constant sources of excessive and unnatural nervous expenditure, any hereditary condition that creates an uninterrupted leakage of nerve-force, may be an important factor in fitting the human soil for the seeds of disease that are ever present and ready to take root?

Should investigation end whenever microbes or toxic materials are discovered in the human economy? Should the causes of a diseased condition be regarded as determined so long as the underlying factors that enable this cause to exist and flourish are ignored? Which is the most important in medicine—to ascertain what adventitious agent can do damage under favorable conditions, or to so improve the nervous power of a patient as to enable the body to resist the seeds of disease?

* So long as we are incapable of fighting our foe (when once established with a firm foothold within the human economy), what have we gained from the standpoint of the sufferer by simply knowing the name, exact appearance, or seat of the enemy?

I would not be construed as decrying the scientific results obtained by careful, painstaking bacteriological or pathological research. They undoubtedly tend to furnish the medical practitioner with some knowledge, after the chaff has been eliminated and the wheat carefully collected, that may in time aid in the prevention of disease, and possibly facilitate its cure. But, while these investiga-

tions are going on, while with great rapidity theories are being hatched and exploded, while the views of today may not be those of tomorrow, is it not the duty of every earnest practitioner of medicine to listen with attention to clinical facts that are capable of absolute verification, that are often fraught with immediate results to suffering humanity, and that open a wide field for the treatment and relief of obscure nervous diseases?

The ten cases which I desire to present to the reader in this connection are of special interest to the general practitioner of medicine because many forms of drugs had been employed by physicians of repute upon these sufferers (prior to my treatment of their eyes) without any appreciable benefit of a permanent character. I am therefore justified, I think, in claiming that simply by the arrest of a leakage of nerve-force (which had been entailed upon these patients by errors of focus and certain anomalies of adjustment of the eyes) I gave nature for the first time a chance to reassert herself in these patients, and I thus restored indirectly the condition of perfect health.

To anyone who delves in the medical literature of the past, and who reads the theories that have flourished and been forgotten, it becomes at once apparent that the tendency of this age is to seek for the causes of disease, and, as far as possible, to remove them.

The argument that is advanced here is no longer a theory. It is supported by well-established physical laws and sustained by physiology. Furthermore, the results obtained when the abnormal eye factors have been scientifically determined and removed, can be shown to be almost instantaneous, and somewhat startling, in many of the cases thus treated.

In the reported cases which follow, some technical terms are employed that may require explanation to the general practitioner, although they would be easily understood by the oculist. These are comprised in the following table:

Terms related to the focus of the eye. (<i>refractive terms.</i>)	{	HYPERMETROPIA (<i>far-sightedness</i>). A <i>shallow eye</i> (from the front to the back), causing an imperfect focus of objects.
		MYOPIA (<i>near-sightedness</i>). An <i>elongated eye</i> (from the front to the back), causing an imperfect focus of objects.
		ASTIGMATISM. An <i>irregularly curved cornea or lens</i> , causing distortion of images on retina.
		EMMETROPIA. A <i>perfectly constructed eye</i> .

Terms related to the muscles which move the eyes (muscular terms.)	{	ESOPHORIA. A tendency of one or both eyes to deviate toward the nose.
		EXOPHORIA. A tendency of one or both eyes to deviate toward the temple.
		HYPERPHORIA. A tendency of one eye to rise above the level of its fellow.
		ANAPHORIA. A tendency of both eyes to assume too high a plane.
		KATAPHORIA. A tendency of both eyes to assume too low a plane.
		HETEROPHORIA. Any abnormal adjustment of the eye muscles.
		ORTHOPHORIA. Normal adjustment of the eye muscles.
		ADDUCTION. The power of the internal muscles of the eyeballs. <i>It varies in health between 25° and 60°.</i>
		ABDUCTION. The power of the external muscles of the eyeballs. <i>It should be 8° in health.</i>
		SURSUMDUCTION. The power of the vertical muscles of the eyeballs. <i>The right and left should be alike.</i>
Various forms of glasses employed by oculists.	{	SPHERICAL. Ground upon a <i>convex or concave sphere</i> . Used to correct hypermetropia and myopia.
		CYLINDRICAL. Ground upon a <i>convex or concave cylinder</i> . Used to correct astigmatism.
		PRISMATIC. <i>Two plain surfaces of glass meeting at an angle</i> . The thick side is termed the base of the prism. Used to relieve errors of adjustment of the eye muscles.

One very important fact is brought out in the clinical history of some of the cases here reported, to which the attention of the reader should be forcibly drawn, viz.: that the correction of the refraction, of some of these patients by glasses had been very thoroughly done by competent oculists before I saw the patients, without any appreciable relief to their nervous symptoms.

This point is made here because it has been, and still is asserted by a few oculists of repute, that "all muscular defects in the orbits are dependent upon and always caused by errors of refraction." Such a statement is too absurd and untenable to be discussed seriously. It can be proven so beyond the possibility of a doubt, by any one who has had a large experience in treating anomalies of the ocular muscles.

Cases I. II. and III. alone ought to show to any unprejudiced mind that the refraction of the patient was independent of the muscular defects. Yet these defects entailed eye-strain to a degree that was destroying the general health—and still they had been overlooked or ignored.

Case I.—*Nervous prostration, with melancholia and complete physical collapse.*—Mrs. C., married; age, 35. This patient had always been near-sighted and astigmatic. She had worn glasses since she was a girl. Like most sufferers, who are victims to the peculiar form of anomaly of the eye-muscles that she disclosed, she had been troubled more or less from childhood with headache. She had always been rather a delicate woman; but in latter years she had gradually become unable to endure shopping, attendance at the theatre, or traveling without marked physical exhaustion and suffering. Although the wife of a very prominent lawyer and blest with all the surroundings of wealth, she also commenced some five years before I saw her to suffer greatly when using her eyes for any length of time. For this difficulty she was treated by various oculists, but without any marked benefit. Gradually her physical condition began to run down; in spite of tonics, massage and electricity. With this loss of strength an alarming change in her mental condition developed. From being a buoyant, happy wife, she became almost a melancholiac. From this condition it was impossible at times to arouse her. She was obliged in consequence to give up almost all social duties and amusements; and the accompanying physical weakness kept her confined to the house for a greater portion of the time.

Her family and physician had become justly alarmed before I saw her lest her mental condition might assume an incurable type. She was sent to me to ascertain chiefly if I could find any cause for her nervous collapse and mental depression. A careful examination of her eyes showed that she was wearing proper glasses for her near-sightedness and astigmatism; but that a high degree of "latent" esophoria existed. During the few days that she wore prisms (for the investigation and partial correction of this trouble) she experienced such immediate and marked relief both in respect to her eyes and physical weakness that she and her family both welcomed with delight a possibility of a radical correction of the esophoria and the cessation of its attendant eye-strain. During the six weeks she was in New York under my care, a button-hole tenotomy was performed by me on both internal recti, with the most gratifying results from both the physical and eye-standpoint. The improvement in her mental condition was immediate. Before she left this city to return home, she was able to walk long distances, do moderate shopping without fatigue or headache, attend places of amusement and use her eyes for reading with more comfort than for many years. It is now over a year since she returned home. During that time she has entirely regained her former cheerfulness and health. She is today regarded by her physician and family as entirely cured. Her headaches have entirely ceased. She is no longer car-sick. She is able to use her eyes moderately without pain or inconvenience. She has gained greatly in weight and strength, and is again prominent in all social affairs.

Eye-tests were lately made in my office to see if her eye-muscles required further treatment. It was found that perfect "orthophoria" existed. The balance established by two painless steps was perfect;

and no trace of the old tendency of the eyes to cross could be discovered.

Case II.—*Severe headaches of a chronic type with frightful exacerbations, that had yielded to no previous treatment.*—Dr. E., age 44; married. This patient is one of the leading surgeons of America. For many years he had been the victim to frequent and frightful headaches, which absolutely prevented all surgical work for several days at a time. On his first visit to my office he reported that he "had not been free from headache sixty days in the past year." For years he had tested thoroughly every form of therapeutic measure for relief of pain. The results had been absolutely negative. Like many others he had been somewhat prejudiced against the views which I hold; and he had been strengthened in his prejudice by the statements of several oculists of prominence that his eyes had nothing to do with his headaches.

When he first came under my care, the most careful examination of his eyes under atropine failed to show much if any refractive error; and to this day he can not tolerate any glass with comfort, except a weak spherical glass for his surgical work, as the result of age. He disclosed, however, after some days of repeated tests and observation, a high degree of "latent" esophoria, and also some tendency of the left eye to assume a higher plane than the right eye—left hyperphoria.

Within the space of one year, I performed a button-hole tenotomy upon both of his interni and I also lowered his left eye. Since that time he has passed about eighteen months with practically no pain; has never lost for one day his ability to do surgical work; and he has quite lately assured me that he regarded himself as perfectly cured. He is able now to use his eyes with absolute comfort at all times; and without the headaches that were sure to follow eye-fatigue, before his eye-muscles were properly balanced.

From a stoffer he has now become a thorough convert to the importance of seeking for eye-strain whenever a tendency to headache exists.

Case III.—*Excruciating Facial Neuralgia, incurable by drugs and leading to suicidal impulses.*—Mr. C.; married; aged 35; hotel manager. This patient came to place himself under my care after years of the most acute suffering that it is possible to describe. He had suffered for ten years with almost constant facial neuralgia, involving chiefly the left side. So long as the pain was moderate, he could endure it. Acute paroxysms would come on, however, very frequently and at unexpected times without apparent cause. The intensity of the pain at such times in the teeth, cheek and orbit would almost deprive him of reason until morphine could be administered hypodermatically.

He was treated for some years for these attacks by a large number of the leading specialists of New York City without any relief.

oculist of New York, who prescribed glasses to correct about one and a half dioptries of hypermetropia and a slight degree of astigmatism. These he had worn constantly for about three years but no appreciable benefit had been experienced from wearing them, except that he "thought he saw a little better with them." He had been for many months under the care of the late Prof. E. C. Seguin, the distinguished neurologist, who experimented upon him with almost every narcotic known. At one time, aconitia was pushed, under Dr. Seguin's personal supervision, until aconite poisoning appeared. The patient could not at one time talk plainly from the effects of this drug and the tongue and throat became almost paralyzed for several days. The intensity of the neuralgic paroxysms at times made his family fear suicide, and the patient learned to administer morphia and atropia by the syringe to himself when he felt that the attacks were getting beyond human endurance.

Throughout six or seven years of such suffering, this victim to neuralgia consulted almost every specialist of note in his vain efforts to obtain relief—but in despair over his failure, he became my patient at the solicitation of a friend who had been personally cured by eye-treatment.

On examination of this patient's eyes, I found that Dr. Loring had given him glasses that were a full correction for all his refractive errors; but like many other oculists, he had not investigated the eye-muscles, which were seriously at fault. He disclosed a very moderate degree of esophoria at the first examination, but later on I found him to be a victim to "latent" esophoria of a high degree. Within two months, I performed a graduated tenotomy upon both interni of this patient. His neuralgia ceased entirely within a week from the date of the first operation, and he has been entirely free of neuralgia for the past ten years.

About two years ago this patient called upon me while in New York and stated that "his marvelous restoration to perfect health by so simple and painless an operation had been considered a miracle by his friends and family." His eye-tests showed no marked change in his refraction, except that he needed a stronger glass for close work, which was ordered. I found, however, to my delight that the esophoria which originally existed and had caused all his suffering was completely relieved; and he left with the happy assurance that he had no reason as far as I could see to anticipate a return of his old trouble from eye-strain.

Case IV.—Complete Nervous Prostration with a total loss of emotional and mental control, sleeplessness and headache.—Miss B., aged 40, single; lecturer.

Family History.—One sister was over a year a victim to "complete nervous prostration." Father is a very nervous man.

Eye Defects.—Vision $\frac{1}{2}$ °, without atropine. Under atropine, a latent hypermetropia of +0.75 s. in each eye. Patient had never used a glass for reading, but accepted +1.50 spherical glass. Esophoria

3° (which ultimately, under influence of prismatic glasses, exceeded 7°). Adduction, 23°. Abduction, 5°. R. sursumduction, 1°+. Left sursumduction, 2°. The adducting power later on exceeded 43°, and the abducting power fell below 3°. At no time did homonymous diplopia disclose itself (with or without a red glass).

History of Case.—This lady had for some years been doing an excessive amount of mental work. Her profession required an enormous amount of reading. This had been done largely at night. Although small in stature, she had always been vigorous and had taken an unusual amount of exercise. She *had always considered her eyes very strong*, and was loath to believe, when she first came under my care, that her eyes could constitute a factor in her serious nervous condition. Furthermore, she was strengthened in this belief by the fact that she had not long before consulted an oculist of prominence, who had stated that he found no defect requiring treatment or glasses, and who had sent her to one of his friends (a specialist in nervous diseases) for treatment.

The "break-down in her health" began about twelve months before she came under my care. It was attended with an extreme and persistent loss of sleep, loss of emotional control, an utter inability to read or sew (any attempt at the latter always aggravated all her symptoms), a more or less constant headache, an inability to concentrate her intellectual faculties for any length of time, and an aggravated type of mental depression. She feared, and had every apparent reason to fear, that her professional labors were imperiled and that her mind might possibly give way. The neurologist, who endeavored to build her up by tonics, rigid diet, rest and the like, assured her (after some improvement had occurred) that he feared at first that "melancholia" might be the end of the case. At his advice, she spent the summer at the sea shore; but, beyond a certain point, she failed to progress satisfactorily, and her headache and sleeplessness would at times be as bad as ever. Any attempt to prepare herself for her fall engagements would cause a return of her old symptoms to a very marked degree, accompanied by physical weakness, mental fatigue and depression, extreme despondency, and a lack of control over her emotions. After any attempts at study she would frequently lie awake most of the night. This was her condition when she first came under my care.

Treatment and Results.—In this case a full correction of the hypermetropia was made for distance, and + 2.00 spherical glasses were given for reading, as she showed some failure of accommodation. Prisms of various strengths were employed over her distance and reading-glasses for about two weeks, and 7° of latent esophoria were found to exist. This was rectified by a graduated tenotomy of one internus and the prisms were then discontinued. During this interval the patient had improved very rapidly, had become very dependent upon the spherical glasses, and become cheerful and hopeful of recovery. She had moreover, entirely regained the normal power of sleep. During this interval she had frequently slept twelve

hours without awakening and without recourse to any drug. As atropine had been used during the early part of the treatment, she had been allowed during the two weeks of treatment to use her eyes very little in reading or study. During the following two weeks two degrees more of latent esophoria disclosed itself. For the relief of this defect a prism was combined with the spherical glass worn over the eye which had not been subjected to a tenotomy.

This patient soon became able to fill all her engagements without any return of her bad symptoms. She has since read and studied at night, attended church and places of amusement that previously she dared not attend, has accepted more work than for some years past, and has continued to sleep well and enjoy perfect health. She has taken no medicine, nor has she been restricted by me in her diet or in any other way. Her reading-glasses have been increased to +2.50 s.

The records of her case show that a graduated tenotomy of the internus of the uncorrected eyes will eventually have to be performed, in order to properly adjust the balance between the two eyes.

During one of her last visits this patient said: "I think I am stronger today and have better health than I have had for many years. I certainly do my work with less fatigue, and enjoy things that my ill-health has previously debarred me from."

(To be concluded in the May number.)

UTERINE HEMORRHAGE.¹

By A. L. BEAHAN, M. D., Canandaigua, N. Y.

ABNORMAL hemorrhages from the uterus may result from distant or local causes, as pelvic congestion, uterine polypi, fibroids, malignancy, retention of products of conception, salpingitis, ovaritis and fungus degeneration of the uterine mucosa. Whether the hemorrhage results from these conditions, or is in close association with several conditions, is not easy to determine. It has been stated that the ovaries have nothing to do with the menstrual function; that the ovum is discharged independently of this period; that the hemorrhage is under the control of a pair of small nerves which enter the uterus under the Fallopian tube on each side and that cutting these would put an end to the monthly flow; that ganglia of nerves exist at the juncture of tube and uterus whose action is automatic and that unless the ligature is applied very close to the uterus when removing the appendages, uterine hemorrhage, either menstrual or irregular, will continue.

¹. Read at the thirty-second annual meeting of the Medical Association of Central New York, at Syracuse, October 17, 1899.

The removal of uterine appendages for hemorrhages, due to uterine myomas of benign character, may be adduced as proof that either the ovary or tube, one or both, are directly related to this result. In uterine myomas the ovaries are often diseased and cystic, or fibroid degeneration has developed in the ovary, hence the relation of ovarian disease to uterine hemorrhage, is evident. Ovarian hyperemia induces menstrual loss and so becomes a frequent cause of anemia, the hyperemia becomes chronic, assuming an inflammatory phase, displacement of the ovary follows and finally impairment of health. The gross lesion in chronic ovaritis gives an increase of fibrous tissue at the expense of normal stroma, or cystic follicles form of the individual or multiple variety to such an extent that but little ovarian tissue is left. Either large or small cystic ovaries are provoking causes of severe and protracted hemorrhages, especially at the menstrual epoch. These hemorrhages may be equally severe with small cystic ovaries as with large. Regarding the relation of the Fallopian tube to uterine hemorrhages, we know that in ectopic pregnancies, if the rupture occurs at the outer portion or at the fimbriated extremity of the tube, surgical measures are demanded and the saving of life may be expected; but, if the tube is ruptured at the inner portion in proximity to the uterus, a fatal hemorrhage may at once occur. This fact is a proof of the theory already advanced as to the importance of the nerve or blood-vessels situated at or near the utero-tubal juncture. The influence of the general nervous system on uterine hemorrhage is very complex and the phenomenon we are now discussing is much influenced by its action.

The application of caustic, astringent, or stimulating remedial measures to the endometrium, if beneficial in checking uterine hemorrhage, must induce the result through the influence of the nerve reflexes, except in degenerative changes of the uterine mucosa, either benign or malignant. Even the curette, now so frequently used to lessen uterine hemorrhages, may exert its influence in the same irritative and reflex manner. Curettement is invaluable in its place when properly done, but the selection of cases requires careful judgment. The curette does not need to be of a stirrup hoe pattern or shaped like a ring fastened to the end of a rod, each made of steel, having sharp cutting edges. Nor does the operation require that the long strips of tissue be cut from the uterine cavity till it is reamed deeply into the normal tissue. Curettement is essential to remove retained placental debris, especially if organised, the granulations of chronic endometritis, for uterine polypi, or malignant

degeneration. But in uteri that have never been disturbed by conception or where myomas exist and in cases having enlarged cystic ovaries, the curette is not indicated. It may do harm. A few cases may properly be related bearing on this subject.

Case I.—Patient, aged 30, single. In 1896 cervix was dilated and uterus curetted for dysmenorrhea and menorrhagia. These symptoms were better for a time, but in 1898 they returned. November 10, 1898, shortly after entering the hospital, had a chill with pain in left side, becoming general over the lower part of the abdomen. Pulse was increased and slight fever developed. November 11, twenty-four hours after the first attack, immediately following a rectal enema, shock developed, patient became pulseless, cyanotic and showed great nervous disturbance. Examination of the pelvis disclosed an enlarged left ovary and exquisite tenderness of the entire vaginal vault. Made abdominal section November 12th. Left ovary was large, cystic, containing old hemorrhages of tarry consistence. The right tube was in a state of acute inflammation, ovary cystic and loops of small intestine contiguous, were of pink color, as if exuded cyst fluid had caused a septic inflammation. Pulse and temperature became normal on third day; the incision wound healed by first intention and convalescence was uneventful.

The question arises, did the curettement in this case induce the hemorrhage in the cyst? If so, is there an intimate correlation between cystic ovaritis and uterine hemorrhages? The cysts by reflex action provoke uterine hemorrhages, while the curette in irritating the cavity of the uterus causes hemorrhages into the follicular cysts, giving small hemorrhagic infarctions, which may finally assume the appearance of cicatrices, or in the larger cysts causes dark, tarry deposits of partially inspissated hemorrhages.

Case II.—The patient, age 32, married, has had no children. In May, 1897, after protracted uterine hemorrhages, was curetted. The flow lessened for eighteen months, then increased, an enlarged appendix with general catarrh of large bowel, obstipation and gaseous distention were always associated in the condition. February 14, 1899, had sharp, serious uterine hemorrhage, became pulseless, face pallid, pupils dilated, surface of the body cold and clammy, in a condition of syncope. Diagnosis of diseased appendages and appendix was made. In a few days she was removed to the hospital, careful preparatory plans were adopted and March 13th, on abdominal section, both ovaries were found so full of cysts and hemorrhagic infarctions that their stroma was nearly destroyed. Appendix was enlarged, inflamed and contained a stercolith. Made clean removal. Pulse and temperature were always normal after operation and recovery was rapid. Health is now excellent.

Case III.—Patient, aged 30, has had three children; last one

born August, 1898. Two miscarriages followed, the first in February, 1899, the second in June, 1899. Admitted to the hospital June 17, 1899. Gave history of fixed delusions since February last, with much excitement, mental symptoms exaggerated at menstrual epochs. Has been flowing much since last miscarriage and excessively for the last two years; is sleepless and worries constantly. It had been reasonably considered advisable to incarcerate in insane hospital. Pelvic examination shows subinvolutions of uterus, enlarged ovaries, especially the left; rectal ulcers and hemorrhoids with vaginismus. July 20th, operated for hemorrhoids and rectal ulcers with slight uterine curettage. Mental disturbance for one week less after which the delusions and excitement were intensified. Three weeks after the first operation, August 14th, an ovariectomy by abdominal section disclosed a dermoid cyst of the left ovary and cystic abscess of right ovary, the tubes on either side being remarkable for their length, which suggested possibility by their dragging of a reflex irritation with mental disturbance as a sequence. Recovery from operation was without a hitch and at the end of four weeks patient went to her old childhood home in the country. Delusions now are practically gone, excitement is abating, sleep is normal, appetite good, weight increasing and return of full mental vigor certainly is promised, though relapses may occur and the present outlook be delusive.

Case IV.—Patient, aged 32; married twelve years; miscarried soon after marriage. No other pregnancy until latter part of 1898. Menstrual hemorrhages always severe. Miscarried about January 10, 1899, after pregnancy of few weeks. In five days peritonitis with great distension developed. Examination showed enlarged ovaries, both tender. Abdominal section, January 24th. Ovaries cystic. Left ovary showed cicatrix of recent rupture of small cyst, with peritonitis, congestion of loops of intestine. Proof of cause of peritoneal attack. Right ovary full of cysts. One larger than the rest. Appendages removed. Recovery rapid.

These major reflexes with their hemorrhages are from without the uterus and uterine hemorrhage is thereby greatly influenced. In uterine myomas the degenerative changes in or upon the mucous membrane are insignificant and will not account for the associated bleedings, but the coexisting ovarian disease may be looked upon as the more probable cause. Local tinkering for uterine hemorrhages with suppositories, swabs of caustics, alteratives or astringents in which category may also be placed, the usual, if not the unusual, surely the uncertain, electrical currents of any and all forms, are unreliable and pernicious. Hot vaginal douches with alkaline or astringent solutions and saline cathartics may be depended upon to meet about all the medical demands and their action is certain. But other forms of medication as ergot, astringents, tonics and tissue builders will always find constant if unsatisfactory employment.

TWO CASES OF MYELITIS.

ONE, SUBACUTE—RECOVERY; THE OTHER, CENTRAL—DEATH.

By EDWARD B. ANGELL, M. D., Rochester, N. Y.

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INFLAMMATION of the spinal cord, or myelitis, is not an uncommon disease. The clinical picture, however, called up in the mind of most practitioners by this term, is one in which a segment of the cord, more or less extended, is involved throughout its whole thickness. This transverse inflammation of the cord is, indeed, but one of the forms in which it may manifest itself. It must be remembered that the spinal cord is subdivided into more or less definite areas or tracts, some of the functions of which are well defined. For this reason a limited inflamed area will develop a symptomatology very different from that resulting from an inflammation of a transverse segment, or from one involving the structures about the central canal. In many subacute cases the grouping of symptoms approximates so closely those due to the slowly developing structural changes of degeneration, that error in diagnosis may easily follow. The prognosis becomes needlessly grave, and a hopeless therapy lets slip the chance of recovery possible in the milder forms of the inflammatory disease.

It is with a view of calling attention to the necessity of recognising early the different phases of a malady, usually regarded as fatal, that I have ventured to report these two cases—one, a limited subacute myelitis, the other an instance of the overwhelming central form, running its fatal course rapidly and changing its symptoms as it involved more and more of the spinal marrow.

Carl H., a farmer, single, aged about 35 years, entered the Rochester City Hospital, December 6, 1898, suffering with almost complete paraplegia. His history was negative and he denied specific disease, though he admitted the possibility of its acquisition. Five weeks before he had felt a "stitch" in his back. He continued work and it passed away. In a few days he noticed a decided lameness in the lumbar region which soon extended to his legs. The legs began to feel numb and cold and became weak. There was some pain in the right hip and knee, but at no time was pain a marked symptom. Until three weeks prior to his entering the hospital he continued to hobble around, but since then found it impossible to walk. At the time of entrance he had lost control over his bladder and he suffered from retention of urine, requiring catheterisation. Unless he was watchful he had involuntary stools. His

legs had become somewhat emaciated. It was difficult for him to stand on his feet; with eyes shut he would sway hopelessly. Even in bed he gave evidence of marked muscle incoördination. The deep reflexes were intensified, both knee jerks being exaggerated, while an ankle clonus could be readily elicited, especially on the right side. Of the superficial reflexes, the plantar and epigastric were retained, the cremaster and abdominal were absent. There was no priapism, nor indeed any erections. The sexual function was abolished. There was some atrophy of the thigh muscles, but only quantitative alteration to electrical stimulation. Sensation to touch and pain was diminished in the legs, especially on the right side. Thermal sensibility was not tested. Over the abdomen, above the umbilicus, sensation was normal; indeed, he asserted that above his legs he was just as well as ever. The temperature was 99°; pulse, 120; respiration, 20. The urine was normal in character. There were no eye indications. Here, then, we had a clinical picture very similar to the one presented by a type of degeneration known as ataxic paraplegia. Paraplegia, incoördination of the leg muscles, some sensory loss below the level of the lesion; absence of eccentric or radiating pains; no marked girdle sensation; increased knee jerks and marked ankle clonus; interference with voluntary control over the vesical and anal sphincters. Associated with these was some loss of muscle in the affected limbs.

Except for its rather rapid development the disease simulated ataxic paraplegia, and doubtless the structures most affected were the areas which become degenerated in the chronic malady. Regarding it as a subacute inflammatory process, possibly due to specific trouble, notwithstanding his protestation of innocence from the malady that lurks in evil places, I placed him upon antipyrin and the iodide of potassium. Antipyrin certainly seems to have some control over congestive conditions of the nervous system. It was given in five grain doses every three hours, while the iodide of potash, well diluted, was increased two grains each dose, until he was taking two drams, three times a day. Later, as he began to improve, electrical exercise of the leg muscles was instituted with beneficial results.

Within a week there were indications of improvement which shortly became rapid and early in January, a month after his entrance, he left the hospital, recovery being well advanced. He could walk with ease, though with some spasticity of gait. He had regained control of the visceral functions, the numbness and coldness of the legs had passed away and he regarded himself well enough to take French leave, unwilling to accept my earnest advice to remain longer in order to insure lasting recovery.

June 12th, he presented himself at my office and gave a good

account of the intervening time. He had worked steadily, had regained his normal weight, and aside from subjective numbness, more noticeable in the right leg, regarded himself well. Examination, however, elicited evidence of some limited degenerative changes in the cord which may yet cause trouble. There was a distinct band-like girdle sensation about the right side of the abdomen on a level with the navel; slight atrophy of the right thigh with excessive knee-jerk and right ankle clonus. The cremaster reflex, formerly absent, responded promptly; there was no sensory disturbance nor difficulty in gait. A trace of the former loss of control over the bladder persisted in a spasmodic or jerky urination. Unless the degenerative changes extend, he is practically well and will suffer little inconvenience from the results of the focal myelitis.

A true paraplegic ataxia is very slow in development, requiring months to become pronounced, but when once established the disease can only be regarded as hopeless. Subacute myelitis, on the other hand, is relatively rapid in its onset and in its early stages amenable to treatment. If, however, the acute stage results in permanent anatomical changes, recovery is not complete and progressive degenerative changes, either above or below, may follow in accordance with the pathological law. The other case that I record is of a unique character. The initial trouble was a slowly progressive degeneration or sclerosis of the lateral columns—spasmodic paraplegia. Suddenly there was a marked change in the symptoms and an acute inflammation of the cord developed. It extended rapidly along the central canal, both above and below the site of the original focus of sclerosis and resulted fatally with the development of abnormally high temperature.

November 22, 1899, I saw, in consultation with Dr. McCaulay, Mr. G. N., a married man of 47 years. His family and personal health history were without interest, with the exception of a bad attack of acute inflammatory rheumatism, eleven years previous. From this he never fully recovered, although it did not interfere with his vocation, that of collector. He was beyond the suspicion of having had syphilis, the possibility of which he denied. Early in October, 1896, a year before, he first noticed prickly sensations in the toes and fingers of all extremities. They gradually became more pronounced; his leg muscles became weak, walking an effort and spasmodic in character, with a gradual developing paraplegia. In a year he was no longer able to walk, found it almost impossible to stand and his leg muscles became stiff with easily developed spasm. Incoördination was so pronounced that he "lost his feet in bed" His arms were unaffected. He suffered no pain and mentality was

excellent. Appetite and digestion were good, the bowels for the month preceding my visit, obstinately constipated. The urine was normal and control over the sphincters retained. He had lost seventeen pounds in weight. Examination brought out the following symptomatology. He was scarcely able to stand, requiring support, due to the loss of leg control. All the reflexes, both superficial and deep, were exaggerated below the gluteal. There was a marked ankle clonus in both legs and both knee jerks were very excessive. Above the gluteal the reflexes were unaffected. The leg muscles were stiff and rigid, presenting the phenomena known as "clasp knife" rigidity. They were slightly atrophied. Sensation was unaffected and motor power in the legs was fairly good, he being able to resist passive movements of some energy. The muscular sense was absolutely *nil*; with his eyes closed he could not tell where his feet were when placed one above the other; he really lost their position in bed. Eye examination gave negative results; indeed, above the umbilicus all reactions were normal.

A diagnosis of lateral sclerosis of the mid-dorsal region was made and no hope of improvement could be given. Within a few days he experienced a sudden onset of acute girdle pain about the umbilical region—a sense of severe, unbearable constriction. This was somewhat relieved by poultices and persisted only for two nights. He rapidly became weaker, retention of urine developed and his mind became dull.

December 16th, he was admitted to the Rochester City Hospital, and reexamination showed marked change in the objective symptoms. There was greater weakness in the thigh muscles, which were flabby and wasted in place of the previous rigidity. All reflexes below the gluteal were exaggerated as before. The gluteal and epigastric reflexes had vanished. Insensibility to all impressions was dulled up to the umbilicus. The hand grip was still strong on both sides. There was a decided blunting of the intelligence. He had retention of urine and obstinate constipation. In the course of a week the temperature became elevated, with marked noisy delirium and the paralysis below the umbilicus was increased. All the reflexes of the trunk and lower extremities were abolished and anesthesia developed, its area extending upward as the upper segments of the cord became involved, until its upper border reached mid-sternum. The bowels moved involuntarily and unconsciously. There was spasmodic involuntary flow of urine, except when drawn by the catheter. At no time; however, did the urine become alkaline. On the eleventh day of admission, coma took the place of delirium, the pupils both became equally contracted, the paralysis, both motor and sensory, became complete, and the temperature rapidly rose, reaching at the time of death on the thirteenth day after admission 108°.

At the autopsy, twelve hours after death, the cord was examined from the first cervical to the mid-dorsal region. The dura was not

involved, but there was acute capillary injection of the pia throughout its course and the arterioles penetrating the substance of the cord were markedly distended. Throughout the length of the cord there was great venous congestion. The cord itself was soft and had lost its normal form. Cross section at different levels showed decided softening, especially of the lateral columns in the mid-dorsal region, less so in the cervical enlargement. Unquestionably the mid-dorsal region was the seat of the initial inflammatory action, which extended both upward and downward, involving the whole structure of the cord, but most marked throughout the lateral tracts. In the brain, the dura showed evidence of old adhesions, but no recent pathological change. The pia, however, was in a state of acute inflammation with organising lymph over both frontal lobes, although the congestion of the pial vessels was most marked in the region of the medulla, pons and ventricles. Otherwise there was no intracerebral lesion, nor any evidence of cerebritis.

In this case we have an instance of an acute inflammatory process, developing in a tract which was the seat of a well-established sclerosis. For what cause I cannot say. I can only venture the opinion that at the time of the development of acute eccentric pains about the umbilicus, a small hemorrhage had occurred in the degenerated area. The onset of the pain was sudden and therefore probably due to a vascular cause. The irritation thus set up induced an acute myelitis in the sclerosed areas, which shortly became central and extended rapidly up and down the whole length of the cord, even involving the cerebral membranes. As it extended downward and affected the lumbar centers, muscular rigidity gave place to flaccid paralysis, and the reflexes once exaggerated became absolutely lost. The involvement of the cervical region will explain the abnormally high temperature and contracted pupils, while the injected meningeal vessels of the cerebrum undoubtedly caused the active delirium.

These two cases illustrate the extremes of inflammatory action in the cord. Myelitis, on the one hand, may be light, limited in the area involved and successfully treated. On the other hand, it may be insidious in its beginning, then develop almost explosively and result in a rapidly fatal termination, involving the whole central nervous system.

295 ALEXANDER STREET.

MME. JENNY LIND-GOLDSCHMIDT, the great cantatrice, has left by will \$30,000 to the Samaritan Hospital at Stockholm.

THE RADICAL OPERATION AS APPLIED TO MIDDLE EAR DISEASES.¹

By GEORGE F. COTT, M. D., Buffalo, N. Y.

THIS paper may be considered a supplement to the one brought before the Pathological Section of the Academy in Dec., 1899. At that time the pathological conditions which indicated radical treatment were considered. I will briefly allude to the indications again with other important points which necessarily go with the operation. As early as 1889, Koerner drained the middle-ear cavity by removing bone obstructing a free flow of pus; likewise Kuester, Stacke, Zaufal, Urbantschitsch, McEwen and others. The latter, however, operated chiefly upon cases which suffered rather from results of neglected middle-ear disease. At least three of those mentioned have already completed their hundredth case with phenomenal success. During the last ten years progress has been slow, the number of operators not increasing very rapidly. Of course, we have to deal with a pus cavity, which can easily cause infection of the meninges or the brain itself. The brain may also be injured by a chisel or drill, and so may the large bloodvessels and the facial canal. The serious nature of the operation, therefore, keeps the otological surgeon from venturing.

We promise nothing to the patient, however, except the removal of dead bone and proper drainage. If such cases are left alone one of many complications may occur, and these must also be explained to patient or parents. Cases coming under observation are usually due to scarlet fever, measles, or diphtheria infection; occasionally, caries is found in strumous children.

Most of the chronic cases are due to neglect. For centuries no remedies were known; but since the advent of antiseptic surgery the masters put their best energies at work to keep this branch up with general surgical progress.

Chronic middle-ear suppuration is invariably due to the acute process and occurs mostly in early childhood. Very few cases occur after the age of thirty.

The first more or less radical effort at removal of dead bone and making a large canal for drainage was introduced by Schwartze nearly thirty years ago, and for two decades his method was the only one in vogue. Many cases, however, did not recover, since the operation did not reach the parts affected, but allowed the diseased bone to

¹. Read before the Section on Ophthalmology, Laryngology and Otology, Buffalo Academy of Medicine, February 12, 1900.

continue its destructive work. After twenty years of Schwartz gradual modifications were introduced by a number of German-speaking otologists, who from time to time published their results. Stacke's work being among the first to be published, "the name of Stacke's operation" was applied to his modification. Stacke, however, has fallen in line with other gentlemen in the designation of "radical" since no man can lay claim to priority, each one having contributed his mite to its final perfection. The operation as it now stands comprises opening of the mastoid, which if diseased is cleaned out, then follows opening of the antrum, then removal of the external wall of the attic.

Some operators remove the remains of the drumhead first, then the ossicles which is the more rational. This procedure converts the entire diseased parts into one cavity. This, after curetting, admits the parts to be thoroughly drained and finally filled up with granulation tissue.

Indications.—Simple opening of the mastoid process, according to Schwatze, is insufficient, drainage being incomplete. If, however, this has been done without result further operative measures must be undertaken. Removal by drill, chisel or curette is necessary. This cannot be done through the natural opening, unless the carious process is limited to the ossicles, and the inflammatory product has not caused too much thickening of the canal walls, precluding manipulation through the meatus.

When suppuration is chronic and dead bone cannot be positively made out and treatment has been extended over a certain period without success, radical interference is indicated. Second, retained pus, if its cause cannot be removed within a reasonable length of time; third, hyperostosis which prevents proper drainage, examination and treatment; fourth, when intracranial trouble manifests itself during chronic suppuration; fifth, labyrinthine involvement, or if the facial canal has become affected.

Every chronic suppurative process does not call for radical interference, since discharge from the middle-ear may last for ten or twenty years, in some cases, without the presence of caries. Such cases usually get well with ordinary treatment. It may be impossible to make a proper diagnosis at first, but the results of treatment will prove that the disease does not extend beyond the mucous membrane. Occasionally carious ossicles require removal, when recovery takes place. It does not follow that other parts of the tympanum and adjacent cavities are affected. Any number of cases may be cited showing recovery after ossiculectomy. When, however, the antrum

is affected, removal of the ossicles may mitigate suppuration, but a complete cure can rarely be effected. Schwartz's mastoid operation can accomplish very little when the walls of the middle-ear, the antrum, external canal and ossicles are involved, for the reason that sclerosis of the entire petrous portion of the temporal bone is the rule, with occasional exceptions.

Now, what is accomplished by the so-called radical operation? You all know many cases of incurable middle-ear disease; in other words, chronic discharge from the ear. The patients have been taught it dangerous to interfere, and this became so notorious that treatment was often not permitted. Let us see what benefit the so-called incurable cases may derive: (1) We open into the antrum through a sclerosed mastoid, although the antrum may be very small, and thereby produce direct drainage without injuring the labyrinth or aqueductus-fallopil; (2) we readily enter the desired recesses, even though the sigmoid sinus encroaches upon the mastoid out of the ordinary, without especial harm to the sinus or its contents; (3) we open up all the diseased spaces, from the cells to the middle-ear, thereby creating a funnel-shaped cavity with the large end pointing externally, enabling the surgeon not only to remove all dead bone, but also to observe the future progress of healing; (4) we so constitute the opening that future interference becomes easy and recurrence readily dealt with; (5) last, but not least, hearing is generally improved, provided the internal ear is not involved. Now, this is not accomplished by conveying sound waves to the oval window where the stapes had been attached, but by the sound waves acting upon the tissue filling the cavity made by the operator and are conveyed to the membrana tympani secundaria or the round window. This membrane seems to escape in a measure the destructive inflammatory action, so as still to remain sensitive to sound waves and transmit them to the labyrinthine fluid. This conclusion I infer from the necessary thickening of the covering of the oval window, when the footplate of the stapes has suffered with the destruction of the ossicles and it thereby became unimpressionable. It, therefore, seems to me quite a reasonable deduction.

It is conceded by the best of operators in otology that the radical operation is one of the most responsible in the whole domain of surgery. I believe this, because there are at present very few who undertake it.

Why is it so formidable an operation? What are we liable to encounter? In opening the mastoid process the sigmoid sinus is

easily penetrated. There may have been so much destruction of bone that while seeking the antrum, which may be very small, the base of the brain may be injured, and dealing with a pus cavity the infection may readily be conveyed to the meninges or the brain itself, causing abscess. The semicircular canals of the internal ear may be opened. In removing the external wall of the attic a slip of the chisel may cause fracture of the external labyrinthine wall. A thin plate of bone, separating the internal carotid artery from the anterior part of the middle-ear may be penetrated, causing fatal hemorrhage. The partition separating it from the tympanum may be softened or carious and therefore easily penetrated. I have found sixteen cases recorded where fatal hemorrhage took place through contiguous inflammatory softening. Likewise, the floor of the middle-ear, which separates that cavity from the bulb of the jugular vein may be injured carelessly. The glenoid cavity may be opened, infecting the joint of the lower jaw. The upper part of the parotid gland may be laid bare by the removal of the external cartilage; by chiseling too low, the facial nerve will surely be injured. Laying bare the facial nerve is an accident which sometimes cannot be avoided, when its position is out of the ordinary. It usually courses forward about one inch from the external opening, but has been found only one half inch from that orifice.

Some of these presumed accidents cannot be avoided, while others must be. Those parts unavoidably injured depend for their successful issue entirely upon the strictest kind of antiseptic treatment, not only during the operation, but also at redressings. After the different nooks and corners have been converted into one cavity, all shreds still remaining are cleaned out, the bone curetted and smoothed over, then a probe is used in seeking for sinuses leading from the external canal or middle-ear and, if any are found, they must be carefully enlarged for drainage, no matter where they may be situated. In one case of Koerner's a semicircular canal partially scraped out, a sinus having been found leading into it, healed kindly without any untoward result. If a sinus be found leading into the cranial cavity it must be treated likewise; if neglected fatal meningitis or abscess may follow and all our efforts have been in vain.

Case I.—Mrs. T., of Olean, N.Y., aged 29 years; discharge from left ear twenty-one years, caused by an attack of measles at the age of eight. Could hear watch upon contact only. Could not hear whispering voice at all. Symptoms mitigated by constant treatment, but discharge never ceased entirely. Operation April 26, 1899, assisted by Dr. Blaauw, at Riverside Hospital, Buffalo. Found bone

sclerosed throughout and the mastoid cells were almost entirely absent. The tympanic cavity contained the head of the malleus only. After converting all the cavities into one large funnel shaped space, by two hours of chiselling and scraping away of sclerosed bone the auricle was replaced and the cavity drained posteriorly with iodoform gauze. The external auditory canal was prevented from collapsing by a rubber tube; through which drainage also took place. In this case there was no reaction; the temperature never rose above $99\frac{1}{2}^{\circ}$; pulse ranged from 90 to 120; slept four hours first night and five hours the next. The only pain she had at any time was caused by the tube in the ear and the bandage. On May 22d, four weeks after the operation she heard the watch eight inches and whispering voice two feet. February 9th, she writes me she can hear a watch six inches and the hearing also improved for whispering voice. She has now, ten months after the operation, a slight watery discharge, however not like pus and her general health is very much improved. This patient sat up in bed the third day and left the hospital on the eighth.

Case II.—Miss Eleanor T, aged 21, Lockport, N. Y., had ear-ache a long time, previous to an attack of measles at the age of eight, when her left ear began to discharge which continued for twelve years. Could not hear the watch tick upon contact, or the clock in her room, nor whispering voice. Two years ago I removed some granulation tissue and curetted the posterior wall of the external extremity of the canal. There some denuded bone was found. This treatment mitigated the discharge very much, and held it pretty well in check while the after-treatment lasted. July 12, 1899, the radical operation was performed at the Riverside Hospital, assisted by Dr. Charters and Dr. King. The cavity was dressed the fourth day and patient allowed to leave the hospital. In this case there was some discharge for three months after the operation. This patient had very severe headache almost every day, especially on the top of the head. Since the operation she has had practically none. Weight before the operation, 98 lbs.; today, 109 lbs. February 12; hearing after seven months, watch, ten inches; whispering voice, seven feet; acoumeter, eight feet; ordinary conversational voice, thirty feet; no drainage.

Case III.—Little boy, three years old. During an attack of a severe type of scarlet fever had both middle ears affected, followed by suppuration. Child was in a very bad condition and emaciated. It was decided from the symptoms that the mastoid was affected, which was opened, but found comparatively healthy. On further examination with the probe, the canal was found denuded, the soft parts were dug out, and the whole cavity cleaned out. Nothing of the ossicles could be found. This case was dressed by Dr. J. H. Potter, of Black Rock, for several months. The discharge never entirely ceased. A second operation was undertaken seven months after the first. The ear was dug out again, granulation tissue

removed, carious walls curetted again, nutrition being so poor that the parts would not heal properly. At the second operation a piece of the skull was removed, about three-quarters of an inch in diameter, above and behind the mastoid process, laying bare the dura mater. The scalp was loosened for several inches and brought together and stitched with silkworm-gut. The parts healed kindly, and now after a lapse of several months very slight discharge remains.

Case IV.—Little girl, aged 5; referred to me by Dr. Auel, for chronic discharge of right ear. A polyp was removed and discharge ceased for several months, when it again appeared and continued for two years. The external auditory canal was so narrowed from inflammatory thickening and was so painful, that it was impossible to make a proper examination. Operation at Riverside Hospital, assisted by Dr. Cruickshank and Dr. King, February 1, 1900. The middle-ear cavity contained nothing but shreds of the tympanic membrane. The petrous bone and mastoid process were entirely sclerosed. Operation took an hour and a half, but the child was under the influence of chloroform for over three hours. No especial reaction occurred, and the child slept several hours during the night. Temperature never rose above 100°, but twice during the first week, pulse ran up to 150; after a movement of the bowels it came down to 120. In a week, after the tampon in the external ear had become saturated by the exudate, the dressings were removed. At the second dressing, three days later, the cavity contained a very slight, healthy discharge. In this case there was no drainage behind the ear. The child suffered no pain at any time, excepting upon movement of the lower jaw, the joint having been disturbed while removing the cartilage. Hearing power had improved in this case to watch, four inches; acoumeter, four feet; loud voice, ten feet; and whispering, five feet.

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Society Proceedings.

BUFFALO ACADEMY OF MEDICINE.

Section on Pathology, Tuesday, January 16, 1900.

REPORTED BY FREDERICK H. MILLENER, M. D., Secretary.

THE fifth regular meeting of the Pathological Section for the season was held on Tuesday, January 16, 1900.

The meeting was called to order by the chairman, Dr. BENNETT at 8.50 p.m. Thirty-three Fellows were present.

The minutes of the preceding meeting were read and approved.

The paper of the evening, entitled, "LAWSON TAIT," was read by Dr. STEPHEN Y. HOWELL.

Dr. Howell stated that Lawson Tait became a L.R.C.P. in 1867, and July 29, 1868, he did his first ovariectomy. He was then twenty-four years old. He did five other ovariectomies between that and 1870, when he removed to a suburb of Birmingham. Thus by the time he was twenty-five years old he had done six ovariectomies. In his twenty-fifth year he took his M.R.C.S. and his F.R.C.S., and completed his fellowship in the Royal College of Surgeons, at Edinburgh. Thus early he evinced a want of respect for age, which made him many enemies, as he considered his own opinion equal to that of any one. In 1890, Mr. Tait reached the zenith of his career. For six months in 1892, Dr. Howell had been Mr. Tait's pupil, hence his opportunity to learn much of his character.

In 1893 symptoms of renal trouble supervened, and the last five years of his life were marked with more or less continued invalidism. He was operated on in London, and subsequently developed a chronic nephritis. He was seized on June 3d with renal complications from which he succumbed June 13, 1899.

Dr. WILLIAM WARREN POTTER said that it seemed to him especially fitting that a pause in the busy routine of medical life, such as this, should be made to honor the memory of a deceased member of the profession. Too little attention is given to keeping green the memory of distinguished men; they rise, poise, fall and are gone. The medical men who are thus distinguished are too few. Mr. Tait was one of that number, and he will be long remembered. It is especially appropriate, too, that this section (pathology) should listen to this memorial address. Tait was not a pathologist it is true, but he demonstrated pathology at the operating table. From his experience in operating he established the pathology of extrauterine pregnancy on a firmer basis than it had ever been before.

Dr. Howell has well spoken of the social side of Mr. Tait's life, and the delightful aspects in which it should be reviewed. He was a well-informed man, both in his own work and in the classics and, besides, he was a royal entertainer. He was remarkable in the manner in which he prepared his contributions to the periodical press: everything he ever wrote, whether in local or foreign journals, was carefully sought out and brought to his notice. So, too with every reference made to him in the journals. In earlier days his contributions were dictated but later were written by his own hand. His interest in public affairs was great and his advice was much sought.

He was an intimate acquaintance of Joseph Chamberlain and together they wrought many municipal reforms in the City of Birmingham. The public library in that city is a model and owes much to Mr. Tait.

In looking over his eventful career it seems remarkable that he should find fame in a provincial city, sufficient to bring him patients from all corners of the earth. This fact undoubtedly created jealousy which, together with his rapid rise, led some of his rivals to challenge the correctness of his statistics. His faults made his virtues stand out. No man could attain the notoriety Mr. Tait did without creating many enemies. He was easily irritated. Mr. Tait was very resourceful and few surgeons encountered and surmounted more difficulties than he. One can hardly think of Mr. Tait's career without recalling that of Gregg Smith, whose history in surgical work was similar. Both rose to fame in the provinces, both died young, or at least comparatively so, and each left an enduring fame.

Dr. MATTHEW D. MANN said he came to listen. He never saw Lawson Tait, but corresponded with him. Dr. Mann stated that Mr. Tait had undoubtedly done considerable for gynecology, but did not originate operations. He resurrected old operations and placed them on a firmer basis. We certainly owe a decrease in the death-rate of many procedures to Mr. Tait's work, and it seemed a pity that he was not more evenly balanced.

Dr. A. G. BENNETT stated that he was probably the only physician present who had been a patient of Lawson Tait's. In his younger years Mr. Tait attended him when sick with the measles.

Section on Surgery, Tuesday, February 6, 1900.

REPORTED BY MARSHALL CLINTON, M. D., Secretary.

THE meeting was called to order by the chairman, Dr. J. HENRY DOWD, at 8.45 p.m.

The minutes for the previous meeting were approved.

The essayist for the evening, Dr. FREDERIC S. DENNIS, of New York, was introduced by Dr. Roswell Park. Dr. Dennis at the outset of his remarks paid tribute to the advancements in medical science in which Buffalo has taken an active part, mentioning the cancer laboratory, the introduction of the wet pack in pneumonia, early vivisection by Dalton, and the work in the Health Department on the tubercle bacillus. The first topic of his discourse was:

TUBERCULAR PERITONITIS.

This disease, he said, has only recently been transferred from the realm of medicine to surgery, where it belongs. A positive diagnosis can only be made in this affection by an exploratory laparotomy, and this is always justifiable in cases where there is an ascites that is not due to liver, heart, or kidney lesions. It may be caused by miliary tuberculosis, infected lymph nodes in the mesentery, producing a chronic inflammation and a mass of infected tissues.

Its entrance into the body is by various routes. It may be from the blood, an ulcer of the stomach or intestine which is tubercular, from the ovaries or tubes, or from the genito-urinary tract in the male. From 40 to 50 per cent. are due to a communicating affection from the thoracic lymph nodes and 16 per cent. of all cases are due to infection from the alimentary tract. It may arise as a secondary infection from an infected alimentary tract, as *e. g.*, a tuberculous subject swallowing the tubercle bacillus. Klebs has demonstrated this experimentally by feeding animals pure cultures of the tubercle bacillus. As to age, from Osler's statistics, based on 350 cases we find 27 under 10 years; 75 from 10 to 20 years; 87 from 20 to 30 years; 71 from 30 to 40 years; 61 from 40 to 50 years; 19 from 50 to 60 years; 4 from 60 to 70 years, and 2 from 70 to 80 years. It is more often seen in negroes than in white people and more often in females than in males.

Symptoms.—The onset is gradual with a slow gathering ascites. Pressure symptoms from the mass, nausea, vomiting, constipation, rapid pulse, are among the prominent symptoms. The large majority of cases is not diagnosticated before an operation. Osler reports thirty cases diagnosticated before laparotomy, as due to ovarian disease. We may feel nodules due to a puckering together of the omentum, matting together of the intestines or nodes in the mesentery. Pleurisy with bloody effusion and chronic peritonitis means, trauma being excluded, tubercular infection. Beck lays stress on a difference of 2° F. between the rectal and axillary temperature, as being characteristic of peritonitis with pus. The tumor formed by intestines or omentum may cause pressure symptoms giving rise to jaundice, enlarged superficial veins and the like.

The proper mode of diagnosis without operation is by the systematic use of tuberculin. Give 7-8 mgm. daily, for seven days, and if you get the characteristic reaction rest for a week, then try again; this will give a positive reaction, indicating whether it is a tubercular

infection or not. It must be differentiated from subphrenic abscess, typhoid fever, etc.

Prognosis.—Age is a great factor in the prognosis of these affections and we find that the middle-aged do better than the young or older people. When there is not much matting together and there is a free exudate, the prognosis is better than when there is no exudate and the tissues are bound down to each other.

The cure of this affection is by laparotomy but the reasons for this are in some dispute. It is probably due to the entrance with the air of nonpathogenic organisms, the stimulus to the peritoneum by these, or to the action of the sunlight which gains access to the areas during the operation. Koch's experiments with direct sunlight would tend to prove the latter. In this disease, as in some others, Americans are the pioneers. Dr. Van de Warker, of Syracuse, in 1883, was the first to report a case successfully treated by simple laparotomy and closure.

The technique has gradually improved until now the ideal operation is to open the abdomen, wash out carefully, empty all pockets where found and close. When purulent, wash and drain all encysted pockets. The method of tapping, inflating with sterilised air, and drainage by iodoform gauze should be done only in pelvic cases. 30 per cent. of all cases are permanently cured and the operation itself has a mortality of only 3 per cent. Fibrous forms may recover without operation, but most of them require it, and it rescues the patient. Do it early for it is never contraindicated even in slight invasions. It is only contraindicated in acute miliary tuberculosis, and when effusion follows the first operation.

Dr. Dennis then presented a case of double tubercular pleurisy with pus in one chest and tubercular peritonitis. Both chests were opened, and the peritoneum opened, cleaned out, and closed. The patient made a phenomenal recovery and the result should stimulate all to operative intervention in these desperate cases.

GASTROSTOMY.

The surgery of the stomach for the years previous to the last twenty-five has shown a mortality of 82 per cent. Miculicz has lately presented a series of ten cases without a death. The various operations have undergone evolution until the ideal method has been reached. The key-note to this is in the treatment of the stomach wound. An incision five to eight inches long should be made in the stomach wall and through it to the mucous layer and the opening

into the stomach should be made at the end of the incision. A rubber tube is now sewn in the incision, forming a gutter, and the stomach sewed to the belly wall. This gutter does not allow regurgitation and subsequent excoriation and discomfort to the patient. This is the ideal operation, as there is no leakage and no mortality.

A patient was then presented that showed the utility of this operation. Stricture of the esophagus followed typhoid fever in July, 1897. In 1898 the patient consulted Dr. Dennis after three months' treatment by gradual dilatation and no relief in a Philadelphia Hospital. On entering the hospital he weighed less than a 100 pounds. His temperature was 96° F. and his pulse 48; he was cyanotic, and in great distress. For three months he had had no food by mouth. Gastrostomy was performed, and while still under the anesthetic, milk and egg were injected into the stomach. The patient began to improve at once, and now after two years weighs 180 lbs., does heavy work, has no leakage and uses alcoholic drinks, which were smelt in the patient's breath. This patient demonstrated the method of feeding himself, after which there was no leakage when coughing with a full stomach. Dr. Dennis's assistant, who accompanied him, reported the patient as having been under the influence of whiskey the day before he was brought to Buffalo for demonstration.

ACUTE APPENDICITIS.

The topic of acute gangrenous appendicitis was next taken up, and it was advised in these cases to let the appendix alone when there was a pus formation and not to handle the gut. The appendix can be removed at a future operation. This is essentially a surgical disease and the brilliant results are seen when the operation is done within 24-36 hours from the beginning of the attack. After that time up to five days let things alone. If cases do not begin to improve in twenty-four hours from their inception, cut in at once, but if they are mild and begin to decline, let them alone as they will get well without operation and a subsequent operation is attended with less danger to the patient.

Many rare lesions simulating acute appendicitis were mentioned, such as ulcer of the stomach, sprains of the psoas and iliacus muscles, rheumatism of the same or of the abdominal muscles, etc., and the advisability of making a very careful diagnosis discussed. In recurrent cases operate between the attacks as well as in all mild cases that suddenly become severe. In speaking of the symptoms, first

the pulse was mentioned. An accelerated pulse is a constant symptom, usually over or near 100. Pain—an early sign, local, and significant of peritoneal invasion. Tumor—a sign of value, but frequently difficult to detect. Temperature—unreliable as a guide, but a gradual rise means a severe case. Nausea and vomiting—if persistent after twenty-four hours, is very significant of peritoneal infection. Distension of the belly—after twenty-four hours this is very unfavorable. Leucocytosis—this is the most valuable sign we have, for a rapid raise means a great deal and means pus, while a decrease means a cessation of the irritation and a subsequent recovery. Constipation—present usually, and tenderness, rigidity, and tympanitis are the remaining symptoms to look for.

Dr. Dennis then gave a detailed report of eighteen cases he had operated on within the last few weeks.

The cure of

MALIGNANT DISEASE BY SURGICAL INTERVENTION

furnished the subject of the closing remarks of Dr. Dennis, but he requested the secretary not to publish them as he wished to record a series of 100 cases before submitting his views for publication.

A vote of thanks was unanimously tendered the distinguished visitor for the instructive evening he had afforded the section.

*Section of Ophthalmology, Otology, Rhinology and Laryngology,
February 12, 1900.*

REPORTED BY RICHARD H. SATTERLEE, M. D., Secretary.

THE meeting was called to order at 9 p. m., Dr. W. S. RENNER in the chair.

Dr. Geo. F. COTT presented a paper on The Radical Operation, as applied to Middle-Ear Diseases (see p. 666).

DISCUSSION.

Dr. LUCIEN HOWE.—As to the anatomical relation, Dr. Cott did not mention the difference, as many cases of this nature occur in childhood. I appreciate the difficulties specially when operating on children. The operation in children from the proximity of the facial nerve makes the danger of facial paralysis very great.

Dr. E. E. BLAAUW.—I think we must congratulate Dr. Cott on his fine results. I think the success in getting union by first intention is due to the climate of this country. In the old country it is most

difficult to get union by first intention after such an operation. Here the ear is pushed back and heals readily, while over there the difficulty is with an edematous mass which occurs usually after operating. In the old country these cases are kept in hospitals for months after, while here the case leaves the hospital usually in four days. About the hearing; why they hear so much better is because the whole bone conduction is better.

Dr. COTT.—I had to limit the length of the paper, hence I did not go into the anatomy as Dr. Howe suggested. In the very young child there is practically nothing but the tympanic ring which makes the operation more difficult, as Dr. Howe also points out. Facial paralysis never lasts if the nerve has not been injured. Sometimes in healing, granulation tissue will press upon the nerve, producing paralysis, but this is only temporary. Regarding such prolonged treatment in the hospital, I think this is unnecessary. I only take cases to a hospital at all, merely because it is more convenient to operate there. I do not mean by this that I dismiss the cases when they leave the hospital; on the contrary, they are under observation for months after, to see that no complication arises. The theory about hearing has not been satisfactorily settled. There are many things about the ear concerning which we are as yet in ignorance, but the day is surely coming when ear surgery will be done as understandingly and with as good results as abdominal surgery.

Section on Medicine, February 13, 1900.

REPORTED BY J. C. CLEMESHA, M. D., Secretary.

THE meeting was called to order at 8.40 p. m. by Dr. E. H. LONG, Chairman.

In the absence of the regular secretary, Dr. DEWITT SHERMAN was elected secretary *pro tempore*.

Dr. B. G. LONG made a report concerning measles in a family in which during an attack the mother was confined and the baby was born with a typical measles eruption.

Dr. A. A. JONES reported a patient who had typical measles for the second time, showing Koplik's spots during the second attack.

Dr. DELANCEY ROCHESTER reported a case of convalescing scarlet fever which had a second attack of the disease followed by a serious nephritis.

Dr. CHARLES G. STOCKTON took exception to the statement, that recurrences of measles were common; in his belief and experience such recurrences are very uncommon indeed.

Dr. E. H. LONG reported a patient suffering from scarlet fever with a very high temperature, decided angina, cyanosis, etc., with desperate symptoms. Antistreptococcus serum was used at two hour intervals, in all, 40 c.c. Later, the temperature again rose, when abscesses formed in the neck, which were incised and four ounces of pus released.

Dr. M. D. MANN reported the findings of a committee appointed by the American Gynecological Society on the subject of antistreptococcus serum. The conclusion of the committee was that this serum was nearly valueless, or at any rate its action was very uncertain.

The paper of the evening was then read by Dr. Mann, whose subject was

DRESS REFORM.

He said the follies of fashion have been for so long and are still so connected with women's attire that it is hard to separate the contempt they have engendered from its proper consideration. There seems to be innate in the human mind, soon after it emerges from the state of lowest barbarism, a tendency to modify natural forms, as witnessed by the Indian woman of Alaska, who puts a pin through her upper lip causing it to fall over the lower one; the women of China, who squeeze their feet to a shapeless mass; and so it is in various people throughout the entire world, each have their special mode of causing an artificial effect to their forms or features.

Civilised women endure a waist disproportionately small and commence at the early age of childhood to attain the desired effect. In this way they deviate from the well known classic forms which have been and are the standard of beauty. Taking the Venus de Milo as the highest type, we find the proportion of waist to height is as 47.6 to 100. In other words, a well developed woman to be properly proportioned according to the classical standard should measure round her waist nearly half her height; for example, a woman 5 feet 6 inches tall should have a waist measure of about thirty-one inches.

Measurements made from a large number of American women who wear corsets show a ratio of waist to height of 39.6. Similar measurements of Chinese, Japanese and Indian women, who do not constrict their waists, correspond to the classical standard, and some

even exceed it. The conclusion is that the small waist is unnatural, inartistic and opposed to all that the best taste demands for beauty.

The corset does not come in for all the blame in the development of the narrow waist. The ordinary dress consists of three garments hanging from the shoulders, six from the waist, so that we find usually, counting each band as two thicknesses, sixteen thicknesses around the waist. Such an arrangement put on a growing girl cannot help but result in a greatly constricted waist.

From the physician's point of view the constricted waist is a deformity, giving rise to many displacements of abdominal organs, stomach, large intestine, liver, kidneys and certain more delicate organs below. In a large number of men and women examined, it was found that visceral prolapse was nearly seven times as frequent in women as in men. Among other evil effects caused by corsets and tight clothing, is an abnormal respiration, weakened abdominal muscles, protuberant abdomen, with a local accumulation of fat, and curvature of the spine, either lateral or posterior.

Now as to the proper hygienic dress, which requires four garments: First, a union undergarment; second, in cold weather, equestrian tights; third, muslin waist and skirt in one piece; fourth, a dress so made that its principal weight will fall upon the shoulders and be distributed over the bust and hips. No corset, no corset waist, no bands around the waist, no belt, everything free and flowing. It is admitted, however, to obtain this ideal "a campaign of education" is needed. It is only by education on what true beauty really consists, on a spreading of a knowledge of the rules of art, and a study of and familiarity with classic models that we shall come to realise beauty of form and grace of vesture in daily life.

DISCUSSION.

Dr. H. R. HOPKINS said that the principles of reform in this direction should be that of beauty, rather than the hygiene of dress as ordinarily understood. He said that there is no one cause of bad development in women, for the Cadets at West Point show the same disposition as described by Dr. Mann. Proper training and development correct this. Referring to the statement that there is no waist-line in nature, he invited attention to the wasp and greyhound as examples of narrow-waisted insects and animals.

Dr. B. BARTOW stated that the proper athletic training in young girls would overcome the necessity of dress reform, because after becoming accustomed to free and unimpeded body movements tight

dresses would not be tolerated. He affirmed that the use of the bicycle has done more than any one single circumstance to advance dress reform.

Dr. DELANCEY ROCHESTER concurred with Dr. Mann in the opinion that dress is the chief cause of deformity in women, and stated that the figures presented by the essayist were very convincing. He suggested the introduction into the public schools of proper physical culture. This would necessitate reform in the present fashions of dress, as the girls could not exercise under its restraint.

MADAME MANKELL stated that corsets are probably the most harmful part of women's present dress. She advised half measures at first, after which more radical means could be insisted upon. The costume which she approves would allow free expansion of lower as well as upper chest. If corsets are removed training becomes necessary so as to avoid looking slouchy.

Dr. A. L. BENEDICT said that no standard for women could be applied as rigidly as for men, as many women cannot stand the weight of their clothing from the shoulders.

The meeting adjourned at 10.45 p.m. Twenty-three present.

Progress in Medical Science.

PEDIATRICS.

CONDUCTED BY MAUD J. FRYE, M. D., Buffalo, N. Y.

OTITIS MEDIA IN INFANCY.

POMEROY (*Boston Medical and Surgical Journal*, January 18, 1900,) emphasises the necessity for routine examination of the membrana tympani in pediatric practice. He quotes Ponfick, of Breslau, who in 100 consecutive autopsies on children under three years of age, dying from a variety of infections and noninfectious processes, found but nine children free from otitis media. He cites a series of interesting cases occurring in his own practice, illustrating the advisability of such examination. Regarding the technique of such examination the author says:

"The best artificial light, a head mirror and an assorted nest of specula are necessary. The external ear should be drawn downward and outward in the child, instead of upward and backward. If the

external canal be obstructed by dirt or cerumen, it should be carefully washed. Nothing but long-continued practice will suffice to give one a definite idea of the appearance of the tympanic membrane, either in health or in disease, but with this practice any practitioner may become as expert as the most cultured aurist. In very many cases there is no abnormal appearance to the exterior of the tympanic membrane, and yet the middle ear may contain pus and be the source of toxemia, threatening life. An incision made carefully in the lower posterior quadrant of the tympanic membrane is wholly free from danger and will frequently reveal a case of grave disease, and at the same time be the means of almost instant relief. Thorough cleansing of the ear should be done before puncturing."

HYDROTHERAPY IN PNEUMONIA.

BARUCH (*Pediatrics*, January 1, 1900,) says that in the pneumonic fevers of children I am in the habit of using the gradually reduced full bath, placing the child's entire trunk into water at 96°, using continuous friction over the body, while another person adds ice water, so as not to touch the body, until the bath water is reduced to 85 or 80°—duration five to eight minutes. Such a bath should be followed by drying and friction. I have found the chest compress at 60°, repeated every hour or two, an effective auxiliary. It deepens the inspirations; temporarily increases cough, and thus aids in the expulsion of stagnant secretions; arouses the heart, causing cyanosis to disappear for a time; and when the compress gets warm, we have the poultice effect of calming irritation, inducing sleep, and relieving pain, without the relaxation incident to the old-fashioned warm poultice. I usually begin the compress at 100°, then gradually reduce each time from one to five degrees, until sixty are reached.

In desperate conditions of broncho-pneumonia, whether idiopathic or complications of the exanthemata, when the skin is cyanotic, the respiration shallow, the pulse rapid and almost imperceptible, the extremities cold, although the internal temperature may be high, I am in the habit of ordering a stimulant and personally administering an affusion with a basinful of water at 60°, poured with some force over the shoulders of the child, while the latter is held semirecumbent in a tub of water at 105°, reaching to the navel. Followed by drying and friction, and repeated every hour or two, increasing the number of basins of water up to four, I have observed the overloaded bronchi relieved, the inspiration deepened and calmed, expectoration increased, cyanosis removed, and the pulse greatly improved.

THE IMPORTANCE OF REST AFTER ACUTE CARDIAC INFLAMMATIONS
IN CHILDREN.

HOLT (*Archives of Pediatrics*, December, 1899,) emphasises the importance of prolonged rest in bed after acute cardiac inflammations in children. He says: There are three reasons why cardiac inflammations are likely to be especially serious in young children. (1) The frequency with which both the endo- and pericardium are involved; (2) the great tendency to acute dilatation; (3) the liability of these attacks to be complicated by pneumonia. The cardiac muscle, like the voluntary muscles, in young children, has by no means the resistance which it attains in later life; as a consequence of this, it happens that under the strain of an acute inflammation, dilatation comes on very readily in the adult. The danger of dilatation is much increased in cases complicated by pericarditis. It is largely owing to rapid dilatation, that we see so many cases succumb during the acute attacks, and it is usually in consequence of progressive dilatation that cardiac failure with dropsy and all its attendant features so often follows within a few months of the primary attack.

This condition of the heart walls must be the chief consideration in the treatment of acute attacks, not only during the period of active inflammations, but for a considerable time afterward. If we would minimise the injurious effects of acute endo-pericarditis, we must secure to these patients as nearly absolute rest as is possible, for a period of two or three months after acute symptoms have subsided. In few things are physicians more blameworthy than in allowing children to get up as soon as acute symptoms have disappeared, after they have suffered either from acute cardiac inflammations or from general infectious diseases, particularly diphtheria, scarlet fever or typhoid. Two cases illustrating the possibilities of cure when prolonged rest is carried out, and one the disastrous results following failure to adopt the rest treatment, are reported in detail.

THE PREVENTION OF FEEBLE-MINDEDNESS.

AT LEAST as much importance (*Brit. Med. Jour.*, 1899, No. 2026, 1209,) attaches to the means of preventing mental feebleness as to the treatment of defective children. When myopia and adenoids—which not uncommonly occur together—are neglected, children are apt to be mentally backward in their school life; neglect of treatment leads to imperfect appreciation through the senses, resulting in deficient mental training. Crippled children may have good brains, though

their physical defects prevent the ordinary means of education, which need to be adopted under the circumstances. Choreic children who have had several such illnesses are often delicate, but are not usually exceptionally dull if the necessary advantages are afforded them. In times past it was often thought necessary to leave the epileptic children without education; modern experience has shown that full, healthy occupation, which may be made educative, increases brain stability and tends to save mental power; while, when the fits begin to pass off, systematic education under due supervision may prevent that degree of mental inaptitude and irritability which so often follows epilepsy. Even the imbecile infant, if well trained from the earliest days, may become well behaved, of good habits, and social appearance; whereas, when neglected, he is apt to grow up unsocial and a greater burden to others than needs be. In all cases of congenital defect early diagnosis and good management are necessary.—*Pediatrics*.

THE BATH IN TYPHOID FEVER.

A. JACOBI (*Pediatrics*, December 15, 1899,) has the following to say concerning bathing, in an article on Typhoid Fever in the young:

“Cold water and warm water are our most reliable and at the same time the safest antipyretics. Stress should be laid on the latter title, because many of the very apostles of hydrotherapy, perhaps influenced by shaky phagocytosis and toxin theories, belittle it in comparison with the nerve stimulating powers of water. Now, cold bathing is frequently contraindicated; it is not borne when the heart is feeble from whatsoever cause; for instance, long duration of the disease, complications with pneumonia, peritonitis, or hemorrhages, previous bad health, or, in the adult, excesses. No stimulant given before or during the procedure is certain to counteract the paralyzing effect on the peripheral circulation. When after a cold bath the feet remain cold and the pulse small, the bath was contraindicated, and did harm. The patients in public hospitals are quite often of a low vitality, and feel the cold bath as a shock; at all events, most of those who arrive in the hospital after a week or two have passed the time when the cold bath might have done good. Of this nature is the latest experience of I. Rudisch in the Mount Sinai Hospital (Mt. S. Rep., Vol., 199). He says: “The Brand treatment reduced the mortality a little over 2 per cent. This reduction occurred in the cases which had been sick two weeks or longer, outside the hospital. Since the intro-

duction of the Brand treatment there has been an increase in the number of cases of pneumonia and phlebitis, and a decrease of those of furunculosis and nephritis. Relapses have increased 2.5 per cent. The death-rate in the relapse cases before and since the introduction of the Brand treatment is practically the same. It has not reduced the number of complicated cases as a whole, but has decreased the number of deaths from toxemia in the causation of the mortality of typhoid fever."

The dangers of cold bathing are not encountered in warm bathing. This is not the place to prove for the thousandth time that a bath of 95 or 90° F. when of sufficient, even when of short duration, will reduce a temperature of 104 or 106°. It is simply a fact. Such a bath may easily be given every three or five hours; even apparently mild cases should have two or three daily, from the beginning to the end of the illness. They reduce the temperature, the accompanying frictions stimulate the cutaneous and general circulation, the general condition is improved, the so-called typhoid state relieved, and the relapses become less frequent. Warm bathing should be the principal treatment of all typhoid fevers, not to the exclusion, however, of occasional medication calculated to have similar effects. The combination of frequent and protracted bathing with proper medication will always remain appropriate, though our resources should, as we expect, be increased by sero-therapy.

Abstracts.

HEROIN HYDROCHLORIDE AS AN ANALGESIC.

DR. KURT WITTHAUER (*Die Heilkunde*, February, 1900,) details his experience with heroin hydrochloride which he administered in solution with aq. laurocerasi. His most favorable results with this drug were obtained in the treatment of simple tracheitis. He has also found it of distinct value in laryngitis, pleuritis, pneumonia, in the first stage, and in the dry forms of pulmonary tuberculosis. It is advisable to commence with small doses of 1-24 grain, and then increase the dose to 1-12 grain, three times daily; larger doses are seldom required. As an analgesic heroin hydrochloride was successfully employed in pleurisy with lancinating pains, for the relief of pains in ovaritis, and also for the gastric distress of nervous dyspepsia. Satisfactory results were also obtained from the subcutaneous use of

the drug in a case of sciatica, and in transverse myelitis with painful contractures of the legs. In the last stage of miliary tuberculosis, with constant cough and stabbing pains, heroin hydrochloride completely replaced the hypodermatic injection of morphine. In all of these cases the initial dose was 1-24 grain, which was increased to 1-12 grain, if necessary. In several instances of myocarditis, with feelings of anxiety and dyspnea, the drug exerted a sedative influence.

THE TREATMENT OF CHRONIC DYSPEPSIA WITH H_2O_2 .

GILBERT (*N. E. Med. Monthly*) reports the following case:

Peter H., aged 40, Hungarian, farm laborer, applied for treatment at my office on July 1, 1899. He was a strapping fellow, mostly skin and bones, of about 170 pounds weight, and would not have been thought ill except for the prominent dark rings under his eyes, his injected conjunctivæ, and a drawn, haunted expression on his countenance, indicative of past trouble or imminent danger. The history he gave was somewhat as follows:

Six years previously, on his voyage to this country, he suffered from an attack of acute gastritis, attended with retchings of the most violent character. Soon after landing he recovered sufficiently to attend to his work; but he says he has never been the same man since. In all this long period he has not eaten a good meal, nor enjoyed what he has eaten, the burning pain in the epigastrium, after meals, becoming so great occasionally that for fear of its repetition he has gone without food for two or three days at a time. Belching of enormous quantities of gas, too, is common with him soon after eating, thus evidencing the presence of undigested food with its resultant fermentation. The patient states, that in order to get relief he has spent all of his wages upon various doctors, specialists, quacks, nostrums, etc., and declares that he is worse today than on the day he first landed in this country.

On examination it was found that he was slightly feverish, pulse rapid, tongue flabby and heavily coated, while the teeth and entire cavity of the mouth were covered with a foul-smelling sticky mucus. That the stomach received, in the process of starch digestion, little or no assistance from the salivary glands of the mouth was plainly apparent. In deciding on the mode of treatment it was obvious that lack of the usual amount of gastric secretion must be met by restoring the physiological conditions upon which the secretion depends. In other words, in order to relieve the inflammatory condition of the gastric mucous membrane and restore the function of the peptic glands, antiseptics were required. The patient therefore was furnished with a flask of ozonized water, made of one part hydrozone to four parts of water, and directed to wash out his mouth every night and morning, thoroughly cleansing the tongue, teeth and gums of the unhealthy mucus and any pathogenic germs it might contain. To

destroy the microbic elements of fermentation in the stomach and dissolve the tenacious mucus there, a mixture of one ounce hydrozone with two quarts of sterilised water was made, and half a tumblerful directed to be taken half an hour before meals. Having thus procured a clean surface in the stomach, the patient was advised to take immediately after meals, a drachm of glycozone, diluted in a wine-glassful of water, for the purpose of enhancing cellular action and stimulating healthy granulations. Of course, he was ordered to select his food with care and eat regularly.

The result of this simple procedure was magical. Although for the first two or three days there was some discomfort after eating, this soon disappeared, and at the end of a fortnight the patient reported that for the first time in six years he was enabled to eat his meals without dread of subsequent distress and eructations of gas. (In the opinion of the writer the fermentation was thus quickly subdued by the active oxidation resulting from the liberation of nascent oxygen.) The treatment was continued in this manner for another month and then gradually abandoned. On September 1st, the patient reported, expressed his gratefulness, said that he weighed 185 pounds and believed himself to be completely cured.

HAND CLEANLINESS.

WHEN we read some of the descriptions of the methods proposed by surgeons and bacteriologists for the proper cleansing of the hands, we are sometimes rather apt to feel that life is somewhat short and uncertain, and that a pressing case might pass out of our hands into the undertaker's before we might be through with such complicated ablutions. If that is the case, there is only one thing left to do—use rubber gloves that may be boiled in a few minutes. But we are not inclined to think that the proper washing of the hands is such a laborious procedure after all, and those of us who prune our fellow mortals with any degree of frequency, know that the habit of washing our hands thoroughly and conscientiously is one that is easy to acquire. Whichever plan we adopt, it is doubtful, whether more than fifteen or twenty minutes need be employed in the process, and there can be no question that it is time very well spent. No man in the world can afford so little as the surgeon to take useless chances, and the comfort taken by a few specimens of humanity in dirty finger nails is too dearly bought at the cost of human lives. The true surgeon is careful and methodical, for he knows that every operation consists in three stages; preparation, performance, and after-care. The surgeon who has not drilled himself into taking equal pains with each one of these three steps will remain a bungler until he has changed the tenor of his ways, and will remain, however brilliant he may be as an operator, inferior to the careful, methodical man who leaves nothing to luck.—*International Jour. of Surgery.*

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges should be addressed to the editor · 284 FRANKLIN STREET, BUFFALO, N. Y.

VOL. XXXIX.—LV.

APRIL, 1900.

No. 9.

MEDICAL LEGISLATION AT ALBANY.

THE number of bills relating directly or indirectly to medical affairs that the legislature is called upon to consider during the present session is surprising; especially so, when it is learned that very few of them are asked for by the medical profession as a body or by any considerable number of medical men as individuals. One would suppose that members of the legislature would get tired of the prevailing methods with reference to the introduction of bills and devise some way for relief.

With reference to medical bills the way to accomplish this is comparatively so simple, the only wonder is that it has not been adopted in the past. For example, there are at present three state medical societies representing three so-called systems of medicine, all of which have been chartered by the state, and all have been charged with certain specific duties relating to affairs that concern the state. To this number is about to be added a fourth—the New York State Medical Association—which has applied for a charter and undoubtedly will receive one. If the legislature would decline to receive a medical bill until it had received the recommendation of these societies; or, having received such a bill, would refer it to the chairmen of the legislation committees of the societies, it would relieve the senators and assemblymen of a lot of perplexity.

The several chairmen of the legislation committees of the four several state organisations could easily arrange for conferences from time to time in regard to such bills, and their approval affixed should be considered evidence of the public usefulness of a proposed law. On the contrary, their disapproval should be considered *prima facie* evidence that the bill is not necessary to the protection or advance-

ment of the public health. In this way the medical profession would have ample notice of any legislation proposed for or against its interests as conservator of the public health of the state. This function—as guardian of public sanitation and to prevent disease—is the well-understood province of the profession of medicine; it is for this purpose the legislature granted charters to organise it into state and county societies, and it is for this purpose it created state medical examining boards. The latter, by elevating the standards of medical education and thus making it imperative upon the schools to turn out better doctors, has contributed not a little toward the fulfilment of the function above alluded to, a self-imposed duty that is always first and foremost in the minds of every well-bred and properly educated physician.

Having thus, by its own laws, erected the medical profession into corporate bodies for the purposes named, would it not be in the further extension of these purposes—namely, the prevention of disease and the promotion of health among the people, for the legislature to say in effect: We will consider no laws of a medical character until you have had an opportunity to examine them, and we will pass none such until your approval or disapproval has been stamped upon it through your duly constituted legislative committees? This would be a dignified way for the legislature to treat the medical profession and it would result in benefit to all concerned. In the foregoing we use the term “medical profession” to include all the different sects, so-called, that are recognised by law, and not in its restricted sense. What we desire is that in matters of medical legislation every legally qualified physician shall have a full voice and a free opportunity to exercise his rights.

Doctors are, for the most part, quite busy men, their services are personal in character and their duties and obligations to their patients are such that they can ill-afford to visit the capital repeatedly, for the purpose of persuading the legislature to hold off its hands. If such a plan as now suggested could be adopted it would benefit the whole commonwealth.

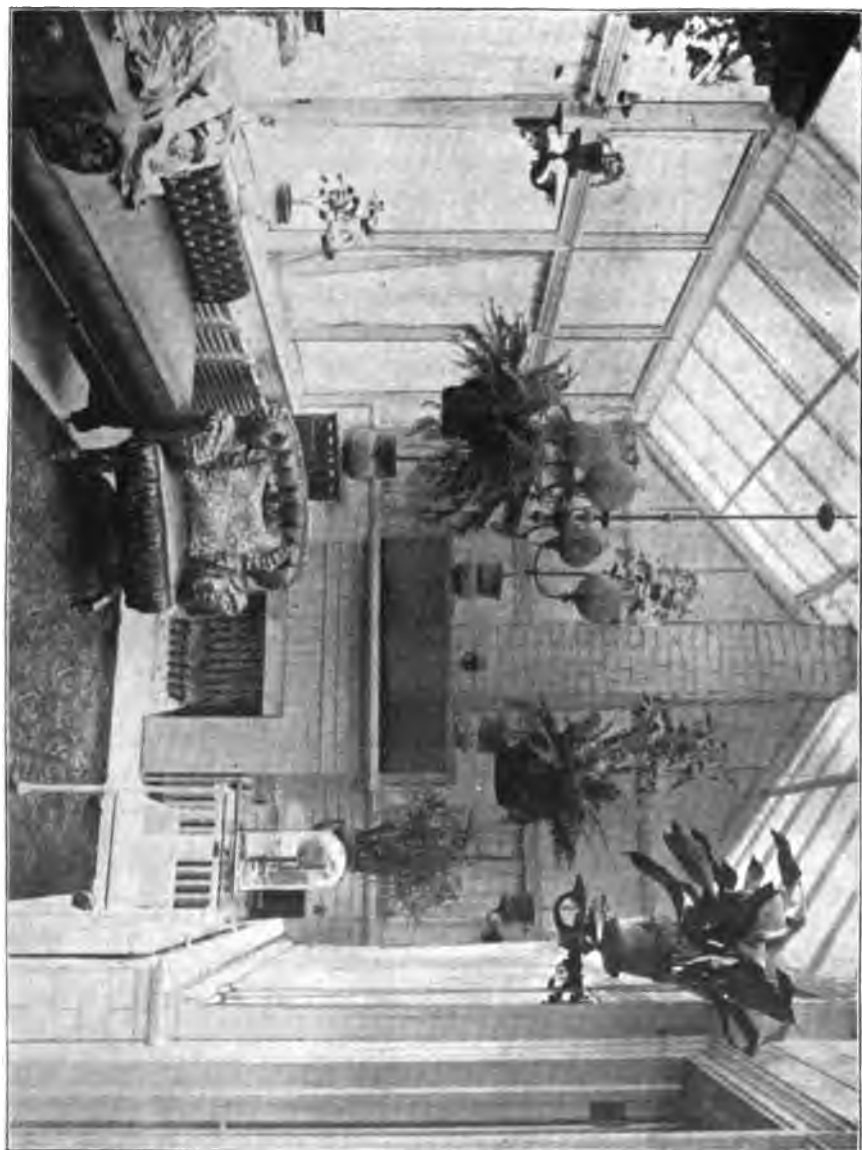
DR. W. W. KEEN, president of the American Medical Association, appreciating the importance of pathologic science, according to the *Journal* of the Association, has appointed unofficially a committee for the purpose of establishing a section on pathology in the Association. The members of this committee from New York are Drs. Roswell

Park, of Buffalo; Edward K. Dunham, of New York, and George Blumer, of Albany, all prominent members of the Medical Society of the State of New York or of its county branches. These are most excellent appointments, the men being skilled in the science of pathology. It is interesting to note that the president of the association thus honors the Medical Society of the State of New York in selecting his aides in scientific work. We do not quite understand, however, what the *Journal* means by *unofficial* appointments. We should say, rather, that the president in his official capacity had made the official appointment of a *provisional* committee, subject to the approval of the association. It is difficult to comprehend how such an act can be otherwise than official. At all events it is a good one, and reflects credit upon Dr. Keen.

IN THE February, 1900, issue of the JOURNAL was published a description of an aseptic consulting office lately built in Buffalo, by Dr. D. W. Harrington, at his residence, 1430 Main Street. We take pleasure in presenting a picture of the interior of this unique and beautiful office on page 691 in this number. We have no doubt it will prove of interest to our readers in general, and especially to Dr. Harrington's many friends in this region. A visit to the office is well worth while, for though the picture conveys a good general impression of the room, it can only be thoroughly appreciated by personal inspection.

DR. FRANCIS E. FRONCZAK, in his report as physician to the penitentiary for 1899, directs attention to some evil practices that prevail with reference to commitments to that institution, as well as to the injustice of sentences in many instances. He says, among other things, that the mistake is frequently made of sending persons up for drunkenness who are really suffering from disease. These sufferers should be sent to the county hospital instead of the penitentiary, as a matter of course, and Dr. Fronczak is entitled to the thanks of the community for pointing out the evil. Moreover, as Dr. Fronczak says, drunkenness itself is not a crime, but a disease, and even such persons should not be punished as criminals; but the report recommends legislation to correct the evils named, and is a most creditable document in all its details.

DR. FREDERIC S. DENNIS, of New York, was the guest of honor at the meeting of the Surgical Section of the Buffalo Academy of Medicine, February 6, 1900. He presented for the consideration of the



DR. D. W. HARRINGTON'S ASEPTIC CONSULTING ROOM—INTERIOR VIEW.

section several absorbing surgical subjects and discussed them most instructively, a report of which is published elsewhere in this issue. He brought with him two assistants and two patients, the latter for clinical demonstration at the meeting. There, were, therefore, five persons in Dr. Dennis's party who came from New York for the purpose mentioned, for which Dr. Dennis assumed the entire expense, declining to be reimbursed by the academy. This is an unprecedented act of courtesy, as well as unselfish liberality, that deserves the highest commendation of every member of the medical profession in Buffalo.

DR. ALBERT S. ASHMEAD, of New York, and Father L. W. Mulhaney, of Ohio, according to the *Tribune*, have drafted a national leper law for the suppression and prevention of leprosy in the United States. This bill, after calling attention to the evident spread of leprosy in every country where isolation is not practised, provides for a square mile to be set aside for a National Leper Home, either in Yellowstone Park or in some other dry climate antagonistic to the life of the leper bacillus. Buildings are provided for in the bill for use of the patients, and provision is made only for voluntary submission to the care of the government. The bill also makes provision, among other things, to prevent lepers from entering the United States in future.

THE New York State Medical Association is asking for a charter at the hands of the present legislature, with a prospect that it will be granted. When we recall the somewhat grandiloquent manner with which it took itself out of the Medical Society of the State of New York a few years ago, asserting that it would have none of its politics, that it did not want legal recognition, but only to be let alone to discuss questions of science and ethics,*it must be confessed the change of front is somewhat abrupt if not surprising.

However, viewed by itself the question is of very little interest, but when the motive is found to be the declared purpose of "assisting in the work of enforcement of the general medical laws" there is ample reason why the Medical Society of the State of New York should oppose the measure. At a recent hearing on the bill before the Assembly committee on Public Health, presided over by Dr. Nelson H. Henry, a member of the association, this point was very clearly made. Dr. E. D. Ferguson, the president of the State Association, who appeared for the bill, promptly denied that it was

the purpose of the Association in asking for this charter to change the present practice with reference to the appointment of the State Medical Examining Boards, or to interfere with them in any manner. He said, moreover, that it was essentially a matter of sentiment with the Association in desiring a charter. Nothing could have been clearer than his expressed denial of any desire to obtain a division of the honors and responsibilities relating to the state examination for license to practise medicine.

It may be that this declaration on the part of the proponents of the bill, had quite as much to do with influencing the committee to favorable action as anything that was said. It is difficult to see how a charter could be denied to any respectable body of men seeking one, and especially when any attempt to injure another similar corporative body is disclaimed, but it would be well for the Medical Society of the State of New York to see that the bill is properly amended to include this disclaimer.

THE health of Paris is reported as unusually good for this season of the year. The sanitary reports of the Paris Board of Health, lately compiled, show that notwithstanding the prevailing influenza epidemic and a slight increase of smallpox—which is just now unusually frequent at Marseilles—the sanitary condition of Paris is more favorable than has been noted in the corresponding season for some years. It had been expected that the tunnelling and open way excavations for the Metropolitan Railway and the general tearing up of the streets made necessary by the new tramway system and by the works connected with the Exhibition, would lead to increased mortality through typhoid and malarial or infectious fevers. An examination of the official figures shows that these apprehensions were groundless; and, further, that typhoid fever is under satisfactory control, with the prospect of a considerable reduction in the death-rate the coming season. This will be good news for those who contemplate visiting the Paris Exposition during the coming summer.

THE Loud bill (H. R. 6071) is being considered again in Congress, and this time with prospects of passing unless strenuous efforts are made against it. Mr. Loud makes the seductive plea of economy—always very fetching with congressmen—in support of his measure. He says the postal service costs the government \$45,000,000 now, and his bill reduces the deficit some \$20,000,000. What the people

want is an efficient, rapid, and frequent postal service, for which they are ready and willing to pay the bill. This measure proposed by Mr. Loud strikes a severe blow at medical journalism and ought not to pass in its present form. Every physician is interested, for if it passes his periodical medical literature will advance in price. Letters addressed to members of congress asking them to oppose the bill would have influence in preventing this measure, which Senator Depew declares is very unjust, from becoming a law.

VIOLATORS of the medical laws are not getting on well in Buffalo. Mrs. F. A. Andrews, of Clifton Springs, who was arrested recently on a charge of practising medicine without a license, was held for the grand jury by Police Justice Murphy. Hon. Tracy C. Becker appeared for the Medical Society of the County of Erie and conducted the prosecution. The charge against Mrs. Andrews is that she attempted to remove a birth-mark from the face of Clifford Kendall, the five-year old son of Mrs. Elsie Kendall, of No. 88 Southampton Street, and that she added to his disfigurement. Her bail was fixed at \$500.

PERSONAL.

DR. HORTENSE V. BRUCE, who since August, 1897, has been the resident physician at Westminster House, on Adams Street, Buffalo, has been appointed superintendent of the House of Refuge for Women at Hudson, N. Y. Dr. Bruce was graduated from the Medical Department of the University of Michigan in 1897. For six months she was interne in the prison for women at Sherburn, Mass. Her work among the poor and unfortunate, coupled with wide knowledge and excellent executive ability, admirably fit her for the difficult position she is called to fill.

DR. CHARLES G. STOCKTON, of Buffalo, was tendered a reception by the Medical Club of Philadelphia, at the Hotel Bellevue, in that city on the evening of March 8, 1900. The JOURNAL is pleased to acknowledge the receipt of an invitation, and regrets that it was prevented from attending to do honor to our distinguished Buffalonian.

DR. F. PARK LEWIS, of Buffalo, has been nominated by Governor Roosevelt to be a trustee of the State School for the Blind, at Batavia.

Dr. Lewis has already served in that capacity, hence will return to the board with a valuable experience.

DR. ROSWELL PARK, of Buffalo, who has been ill from influenza for some weeks is recovering, and it is anticipated that he will soon resume his accustomed collegiate and professional duties.

DR. JULIUS H. POTTER, of Buffalo, who lately underwent an operation for appendicitis at the Riverside Hospital, is said to be improving, with the prospects of early recovery.

OBITUARY.

DR. A. R. WRIGHT, of Buffalo, one of the most prominent homeopathic physicians in this region, died in Chicago, February 24, 1900, aged 74 years. A few days before his death he went to Chicago to consult Dr. N. Senn. After reaching the city he grew worse and died within three days after leaving home. He was born in Crawford, Orange County, on October 19, 1825, received his preliminary education in the common schools and the Albany State Normal School, from which he was graduated in 1848. He taught in the Albany Academy and the public schools of Elmira until 1852, when he began the study of medicine with Dr. N. H. Warner, of Buffalo, who was one of the first homeopathic physicians to settle in this city. He entered the Buffalo Medical College, where he remained for a time, but his health failing, he set out on a voyage to India and China for its benefit. During his absence he served for two years as medical officer on one of the Peninsular and Oriental steamers, plying between Europe and Chinese ports.

With his health restored Dr. Wright attended the medical schools of Paris and came back to this country, taking his medical degree later from the Cleveland Homeopathic Medical College. He began practice in Elmira, but after a year came to Buffalo, in 1859, and had lived and practised here since that time.

In 1898 Dr. Wright was president of the American Institute of Homeopathy and he had been for years a member of the Homeopathic State Board of Medical Examiners.

Dr. Wright married, in 1864, Charlotte Crocker, of New York, who, with two daughters, the Misses Mabel and Rosalie Wright, survives him.

DR. LOREN L. EDDY, U. of B., '97, of Olean, N. Y., died at his home, March 15, 1900, aged 29 years. He was the son of Dr. J. L. Eddy, who is one of the most prominent physicians of the Southern Tier, and the deceased himself was growing into prominence with great rapidity. He was a member of the 43d Separate Company N.Y.N.G., and was the medical officer of the company. His funeral was largely attended on Sunday, March 18th, and the burial was with military honors. Dr. Eddy married Miss Rosalie Baylor Freeman, of Buffalo, who, with an infant daughter, survives him. :

SIR THOMAS GRAINGER STEWART, M. D., F.R.C.P.E., F. R. S. E., LL.D., died February 3, 1900, at his house, 19 Charlotte Square, Edinburgh, aged 62 years. He was Physician-in-ordinary to the Queen for Scotland, professor of the practice of physic, University of Edinburgh, and president of the British Medical Association at the Edinburgh meeting of 1898. Sir Thomas was distinguished for his researches in diseases of the kidneys, and was an acknowledged authority on this subject. He belonged to an interesting group of medical men fast disappearing and which lent lustre to the guild.

SOCIETY MEETINGS.

THE American Academy of Medicine will hold its twenty-fifth annual meeting at "The Shelburne," Atlantic City, N. J., on Saturday, June 2d and Monday, June 4, 1900.

Papers have been promised as follows: President's address; Contributions to the Annual Symposium—The medical aspects of the home, G. Hudson Makuen, Philadelphia; What are the essential conditions for a habitation to develop and maintain a healthful family existence? Rosa Engelmann, Chicago; The influence of early training of manly and womanly qualities to avoid degeneracy," J. Cheston Morris, Philadelphia; Artificial lighting of the home, S. D. Risley, Philadelphia; The influence of medical supervision of children in their homes, J. Madison Taylor, Philadelphia; The physician's influence in re vacation schools, Helen C. Putnam, Providence; Defectives and delinquents inside and outside the family circle, James W. Walk, Philadelphia.

Papers on Miscellaneous Topics.—Is coöperation between colleges of arts and sciences and schools of medicine desirable? A. L. Bene-

dict, Buffalo; Physiologic psychology as a necessary element in medicine, W. J. Herdman, Ann Arbor; Medical education of today, Bayard Holmes, Chicago; Neglected clinical opportunities in American medical centers, S. A. Knopf, New York; Subject to be announced. W. L. Pyle, Philadelphia; The physician vs. medical proprietors and medical patentees, A. Ravogli, Cincinnati; Medicine in the Philippines, Harry Park Ritchie, St. Paul, recently on medical duty with the U.S.V. in Luzon; Report of the special committee to formulate the conclusion reached regarding specialism and advertising at the last meeting of the Academy.

There is room for a few additional papers without crowding the program. Some of these are promised provisionally, but are not included in the list. Anyone desiring to contribute a paper should at once notify the secretary, Dr. Charles McIntire, Easton, Pa., as the policy of the Academy is not to overcrowd the program.

THE Buffalo Academy of Medicine held meetings during the month of March, 1900, as follows:

Section on Surgery.—Tuesday evening, March 6th. Program: Spina bifida, Sidney A. Dunham.

Section on Ophthalmology, Otology and Laryngology.—Monday evening, March 12th. Program: Outdoor relief for eye and ear cases, Lucien Howe; Exhibition of cases—(1) Chronic suppuration of middle-ear, treated by Stacke-mastoid operation three weeks since; (2) Chronic empyema of nasal accessory sinuses, in which antrum, frontal sinus, ethmoid cells, and sphenoidal sinus have been opened, F. W. Hinkel.

Section on Medicine.—Tuesday evening, March 13th. Program: Senile bronchitis, Reynold W. Wilcox, professor of medicine and therapeutics, New York Post-Graduate Medical School; discussion by Charles Cary, Charles G. Stockton and Henry C. Buswell.

Section on Pathology.—Tuesday evening, March 20th. Program: The present status of recent investigations on cancer, with demonstrations by stereopticon, H. R. Gaylord.

Section on Obstetrics.—Tuesday evening, March 27th. Program: The early days of ovariectomy; reminiscences of McDowell, Peasley and others, Matthew D. Mann. Subject to be announced. Helene Kuhlmann.

THE Niagara Falls Academy of Medicine held its regular meeting at the office of Dr. F. R. McBrien, 113 Falls Street, Monday, March 5th, at 8.45 p.m. Dr. McBlain read a paper on Ptomaines, and the discussion was opened by Dr. Leo-Wolf.

THE Congress against Tuberculosis will meet at Naples on the 25-28 of April, 1900, under the presidency of his Excellency Minister Baccelli. The general committee, presided over by Senator Prof. de Renzi, and of which Prof. A. Rubino is the secretary, superintends the arrangements of the congress, the aim of whose labors is the same as that first set on foot at the congress of Berlin. It will be divided into the following sections, each of which has a separate committee of management: etiology and prophylaxy; clinical pathology; therapeutics; sanatories.

In this congress are entitled to take part: physicians, naturalists, engineers, as well as representatives of the social and philanthropic sciences. The subscription for each person is 20 francs (Italian) and entitles to the member's ticket and badge of the congress, as well as to the reduced fares on the Italian railways and steamboats, to the transactions of the congress, and all publications connected with the same, as well as the free entrance to the museums, Pompeii, Herculaneum, etc., etc.

Applications as well as the subscriptions are to be sent to the secretary's office of the general committee, I. Clinica medica della R. Università di Napoli (*Ospedale Clinico*.)

COLLEGE AND HOSPITAL NOTES.

THE Medical Department of the University of Buffalo will hold its 54th annual commencement at Convention Hall, Friday evening, April 27, 1900, at 8 o'clock. The usual ceremonies with reference to conferring degrees will take place under the supervision of the Chancellor, Hon. James O. Putnam, and the Dean of the Faculty, Dr. Matthew D. Mann. The address to the graduates will be delivered by Daniel B. St. John Roosa, M.D., LL.D., of New York, president of the New York Post-Graduate Medical School and Hospital.

The morning of commencement day will be given over to examinations by the curators of candidates for degrees, of which latter there are

fifty or more, and to the class reunions of the Alumni. In the afternoon the annual alumni exercises will take place at Alumni Hall, University Building. These will comprise among other things, papers or addresses by Drs. George Ben Johnston, of Richmond, Va., Lewis S. McMurtry, of Louisville, Ky., and Charles A. L. Reed, of Cincinnati, O. The Alumni meeting is open to the general public, and physicians, undergraduates, ladies and citizens in general who may be interested, will be cordially welcomed. It is desired by the executive committee to make the final meeting of the century a memorable one, and the alumni are requested, by their presence in large numbers, to strengthen the hands of the committee in carrying to successful conclusion their earnest work.

THE New Orleans Polyclinic has been reported suspended on account of smallpox in New Orleans. Dr. Isadore Dyer, the secretary, says this statement is absolutely false. The Polyclinic has had a continuous course since November 20, 1899, and will continue until May 12, 1900. The smallpox situation in New Orleans has at no time justified any apprehension on the part of students attending the Polyclinic or on the part of those who might wish to do so.

THE burning of the pavilion for consumptives at the Erie County Hospital, on the night of March 21, 1900, was most unfortunate in that it deprives a large number of sufferers of the benefit of that institution. While no lives were lost at the fire it is probable that the exposure incident to escaping from the burning building will shorten the days of some of the patients.

The building was of wood and burned so rapidly that some of the inmates barely escaped injury or worse. The lesson is a dear one, but it means that no building should be constructed for hospital purposes that does not meet all the modern requirements of safety from fire.

THE medical staff of the Buffalo Hospital of the Sisters of Charity has been reorganised. At a meeting recently held Dr. Stephen Y. Howell was chosen president; Dr. Lawrence G. Hanley, vice-president; and Dr. C. M. Daniels, secretary. An executive committee was created consisting of Drs. W. H. Slacer, Byron H. Daggett and Eugene A. Smith.

A training school for orderlies and male nurses has been organised at the hospital under the supervision of Dr. B. H. Daggett, who delivered an introductory lecture. There will be two lectures each week by various members of the staff of physicians and surgeons.

Book Reviews.

CLINICAL LECTURES ON NEURASTHENIA. By THOMAS D. SAVILL, M.D., Physician to The West-End Hospital for Diseases of the Nervous System. Pp. 144. London, etc. New York: William Wood & Co. 1899.

The lectures, five in number, were collected and published separately at the solicitation of several of the author's friends, who found in them valuable ideas and experience worthy of a better fate. The first of these lectures was delivered as part of the post-graduate course, which was organised at the Paddington Infirmary in the year 1891. All the other lectures were delivered at the Willbeck Street Hospital for diseases of the nervous system during the years 1897-8, and formed part of the post-graduate course of lectures, delivered by different members of the staff. Among the author's reasons for acceding to the request were the wealth of material to chose from the unjustifiably hopeless view taken by the profession concerning the curability of diseases of the nervous system in general and of the so-called functional disorders in particular and the scarcity of knowledge in the current text-books in regard to the treatment with the various trivial symptoms presented by these patients. As a result of this, not only do many curable patients go unrelieved, but a good number have recourse to charlatans.

In chapter I. the author describes the infirmary and depicts its advantages to be gained by the clinical observer in such a place. He then describes the five methods of research: (1) embryological, (2) secondary degeneration, (3) animal experimentation, (4) the anatomoclinical method, and (5) the method of analogy; this last method being especially applicable to diseases of a functional nature. Then follows a carefully prepared scheme for making the examination of the patient and a very able outline of the pathology of functional disorders of the nervous system. The author believes that these disorders are due in one of six different ways: (1) by the agencies which have a pathological foundation, but which as yet are undiscovered. Included in this group are placed paralysis, agitans, senile tremor and the various spasms; (2) those profound alterations of function, due to toxic substances introduced into the body from without; (3) alteration of function may take place by toxic substances manufactured within the body; 4 alteration of function where the nutrition of the nerve tissues is at fault; (5) those disturbances due to either a deficiency or excess in the quantity of blood flowing to a part without

necessarily any attention in its quality, and lastly there is another group of functional disorders of the nervous system due to an increased reflex irritability, or an increased response to impressions from without. The author very wisely impresses upon his hearers that the time has gone by when everything functional, everything non-structural can be called by the name hysteria.

Lecture II. is devoted to the study proper of nervousness or neurasthenia. It is but a short time ago that the idea of neurasthenia being a clinical entity was scouted by English writers, and scarcely referred to in the leading text-books. Dr. Savill in this chapter proves himself to be a firm believer in the doctrine that neurasthenia is not hysteria on the one hand nor hypochondria on the other, but "an irritable weakness of the entire nervous system, characterised by hypersensitiveness of the tactile sensibility and special senses; by headache, inaptitude for mental work, disturbed sleep and irritability of temper (when the brain is chiefly affected); by general weakness, restlessness, nervousness, and vague pains (when the spinal cord is chiefly affected and usually accompanied (in both forms) by various phenomena referable to the vaso-motor and sympathetic systems." The author then gives examples of cases of this affection, each case selected to illustrate some point in diagnosis, or in symptomatology. The author makes the statement that 90 per cent. of all cases coming to him for mere nervousness are suffering with neurasthenia.

Regarding the symptoms the author states that nearly all the symptoms are subjective, and that the only objective ones are the exaggerated knee jerks and ocular symptoms. The whole general bearing of the case, the tremor, the cornea, the mouth, are all objective symptoms and are perhaps better set forth in our American than in the English cases.

In Lecture III. the author takes up very carefully the question of diagnosis of neurasthenia and the relation between neurasthenia and gastric disorders. These cases, the author believes are due to toxic blood conditions. Out of 157 private cases 74 revealed definite evidences of some form of dyspepsia, and the writer asserts with much reason that gastric disorders result in a defective elaboration of the products of digestion, and the pouring into the blood of a large quantity of imperfectly elaborated and toxic products. Constipation is capable of acting detrimentally in the same way owing to the reabsorption of many materials which are intended for excretion. The author states most positively that neurasthenia is consequent to gastric and intestinal disorders and goes to considerable pains in elaborating upon the different views held by various authors on this much mooted question. Cases are also cited to sustain the author's opinion and his arguments are convincing.

In lecture IV. the author takes up the various forms of neurasthenia; its rapid increase and reasons; the treatment indicated in the several groups and the importance of detail in the care of these cases.

In lecture V. are considered the mental symptoms of neurasthenia and neurasthenic insanity. Of the latter the author states there are

three possible events, which in order of frequency are as follows: (1) Recovery—about nine-tenths of the author's cases have terminated this way after an illness of months; (2) In a few cases, all of which have been advanced in years, the mind fails to recover; all the faculties slowly deteriorate, and a condition of dementia gradually supervenes; (3) death may occasionally ensue, either from progressive asthma, or, as is most common, from a low form of pneumonia.

In the addendum, prepared by Agnes Blackadder, the author gives the various names which have been applied by various authors to conditions resembling neurasthenia, and the opinion of various authors in regard to the nature and origin of traumatic neurasthenia, together with a very full bibliography on the subject, in which full credit is given to Beard for his early and exhaustive writings. The book is well printed, on excellent paper and substantially bound.

W. C. K.

A PRACTICAL TREATISE ON MEDICAL DIAGNOSIS. For the use of students and practitioners. By JOHN H. MUSSER, M. D., Professor of Clinical Medicine, University of Pennsylvania, Philadelphia. New (third) edition, thoroughly revised. Octavo, 1082 pages, with 253 engravings and 48 full-page colored plates. Philadelphia: Lea Brothers & Co. 1900.

We might begin our notice of this book with a dissertation on the importance of diagnosis as a foundation to intelligent treatment, for Musser's treatise would furnish a splendid text for such a beginning. To do so, however, would be but to repeat what every student of medicine is taught, and what every sophomore ought to know. It would, therefore be a waste of valuable time to make more than a simple reference to this important fact.

This author divides his work into two parts, the first being devoted to the consideration of general diagnosis, and the second to special diagnosis. The first part is subdivided into general observations, the data to be obtained by inquiry, the data obtained by observation, the blood, and the morbid processes and their symptomatology. To general observation is given a chapter to data obtained by inquiry—two chapters, to data obtained by observation—eighteen chapters, to the blood and the morbid processes, etc.—one chapter each.

The second part, in which special diagnosis is considered, consist of eight chapters, treating of the nose and pharynx; diseases of the lungs and pleuræ; diseases of the heart, bloodvessels and mediastinum; diseases of the mouth, fauces, pharynx and esophagus; diseases of the stomach, intestines and peritoneum; diseases of the liver, spleen, and pancreas; diseases of the kidneys; and diseases of the nervous system.

From this synopsis it will be readily observed how comprehensive Musser's treatise is and how well he has classified it. When the first edition issued from the press it was easily discovered by an experienced person that it would become a rival of works on diagnosis already in the field, and it soon became a competitor for first

place. This edition, largely rewritten, fairly plants it in the forefront. Schools have adopted it as a text-book, teachers are pleased with it and use it in their classes, students study it and from it learn the first and best principles, while practitioners consult it and are guided by it in the management of disease. When an author has accomplished all this in six years he has triumphed; the goal is reached.

BACTERIOLOGY IN MEDICINE AND SURGERY. A Practical Manual for Physicians, Health Officers and Students. By WILLIAM H. PARK, M. D., Associate Professor of Bacteriology and Hygiene in the University of Bellevue Hospital Medical College, New York. In one 12mo volume of 688 pages, with 87 illustrations in black and colors, and two full-page colored plates. New York and Philadelphia: Lea Brothers & Co. 1900.

The author has attempted to bring together the facts concerning bacteriology which will constitute a text-book sufficient for the needs of the student and of direct practical value to the physician and health officer. Dr. Park is eminently qualified for the authorship of a work of this kind inasmuch as he has been assistant pathologist for many years in the research laboratories of the Department of Health in the City of New York. In this capacity he has done much for practical bacteriology and made his laboratory the Mecca for health officers and sanitarians, who are striving to keep in touch with the latest phases and practices of preventive medicine. In the work before us the author strives to place the essentials of bacteriology before the physician, leaving the carrying out of detail and more difficult examinations to the trained and experienced bacteriologist. This is a capital idea and one which might have been followed by other authors, as it must be patent even to the beginner that careful and therefore honest bacterial research can only be made in thoroughly equipped and up-to-date laboratories. The author particularly emphasises such subjects as the chemical changes produced by bacteria, infection, immunity, the nature and use of protective serums, and the diagnostic value of bacteriological cultures, since knowledge of these subjects is of special importance to the practising physician in that it enables him to obtain an intelligent grasp of the nature of the infectious diseases.

The methods used in the laboratory of the board of health in New York for the isolation and identification of the typhoid, tubercle, and diphtheria bacilli are given with especial fulness, as bacteriological examination of the discharges of persons suspected to have typhoid fever, tuberculosis, or diphtheria are now generally made for these bacteria in the laboratories of the health departments of even the smaller cities, because of the manifest importance to the public of knowing where such sources of infection exist.

Several very important and interesting chapters in the body of the book treat of such practical subjects as practical disinfection and sterilisation (house, person, instruments and food), sterilisation of milk for feeding infants. The various chemical agents are given—that have proved to be of especial worth; the formalin methods are

given with much detail, the author having been a path-maker in the application and perfection of formalin methods. The chapter on water is timely, and the directions given for treating water are safe and sound.

In the appendix are given brief descriptions of a few representative pathogenic microorganisms which are not bacteria, such as actinomyces, plasmodium malariae, ameba coli, the microorganism of smallpox, cowpox and rabies. The illustrations are all well chosen and nicely executed. Several full page colored plates help materially to embellish the work besides adding to its worth and usefulness.

W. C. K.

A TREATISE ON THE PRINCIPLES AND PRACTICE OF GYNECOLOGY. By E. C. DUDLEY, A. M., M. D., Professor of Gynecology in the Northwestern University Medical School, Chicago. New (second) edition. In one very handsome 8vo volume of 717 pages, with 453 engravings, of which 47 are in colors, and eight colored plates. Philadelphia and New York: Lea Brothers & Co. 1900.

A reëxamination of this treatise in detail has confirmed our previously expressed opinion in the JOURNAL (November, 1898,) as to its value. At that time we invited the attention of our readers to the somewhat unique lines upon which the work had been constructed, to the original material it contained, and to the excellent character of its illustrations.

In this second edition all of the excellent qualities of the first have been retained, because, almost without exception, they received the approbation of teachers, students, and reviewers. To these have been added a consideration of the functional disorders of menstruation and sterility, constituting four new chapters, that have been grouped to form part VI. The other five parts remain practically the same as to plan and material as in the first edition. Some of the chapters, however, for example those on cystitis and diagnosis, contain much new matter. The chapter on diagnosis is the best one we have ever read in a work on gynecology. Its arrangement is superb and its methods are unexcelled. It shows everywhere the handiwork of a masterworkman. The same might be said of many other parts of the treatise without exaggeration, but we wish to invite particular attention to the chapter on diagnosis, because of its excellence, and again because of the importance of the topic. It is so important always that the beginner should be duly impressed with the fact that diagnosis is the foundation stone of successful management.

In examining other parts and chapters it is ascertained that nearly every one has felt the effects of the reviser's hand. Words, phrases, sentences, and paragraphs have been expanded, reconstructed, or otherwise modified to add to their clearness, while new material has been introduced wherever necessary to keep the book abreast of the progress of the art. Besides all this, there are six full-page plates and thirty-one illustrations that were not contained in the former edition. The illustrations are of the best, many having been specially drawn for this treatise.

Professor Dudley is to be congratulated upon his most successful entrée into the arena of authorship. He is just the man to write a book, because he has something to say, says it well, and then stops. His book contains no padding—only practical material that is wanted by students of gynecology whether under- or post-graduates, teachers, professors or practitioners.

AN AMERICAN TEXT BOOK OF SURGERY. For practitioners and students. By Phineas S. Connor, M. D., Frederic S. Dennis, M. D., William W. Keen, M. D., Charles B. Nancrede, M. D., Roswell Park, M. D., Lewis S. Pilcher, M. D., Nicholas Senn, M. D., Francis J. Shepherd, M. D., Lewis A. Stimson, M. D., J. Collins Warren, M. D. and J. William White, M. D. Edited by William W. Keen, M. D., LL.D. and J. William White, M. D., Ph. D. Third edition. Thoroughly revised. Imperial 8vo, pp. xvi. 1228.—Price, \$7.00 cloth; \$8.00 sheep and \$9.00 half-Russia. Philadelphia: W. B. Saunders, 925 Walnut Street. 1899.

The list of contributors above enumerated contains the names of some of the most distinguished surgeons in this country, hence the surprising success of this work is explained. The editors announce that it has been adopted as a text-book in more than 100 medical colleges, a circumstance that is more convincing as to the value of the book than would be any words that we could write.

The new subjects presented in this edition are (1) a full consideration of ortho-therapy; (2) leucocytosis; (3) post-operative insanity; (4) the use of dry heat at high temperatures; (5) Krönlein's method of locating the cerebral fissures; (6) Hoffa's and Lorenz's operations for congenital dislocations of the hip; (7) Allis's researches on dislocations of the hip-joint; (8) lumbar puncture; (9) the forcible reposition of the spine in Pott's disease; (10) the treatment of exophthalmic goiter; (11) the surgery of typhoid fever; (12) gastrectomy and other operations on the stomach; (13) several new methods of operating on the intestines; (14) the use of Kelly's rectal specula; (15) the surgery of the ureter; (16) Schleich's infiltration-method and the use of eucaïne for local anesthesia; (17) Krause's method of skin-grafting; (18) the newer methods of disinfecting the hands; (19) the use of gloves, and a few others of minor importance.

In addition to this long list of new topics, several sections have been revised and enlarged, and a number of new illustrations have been introduced. The editors have thought best to cut out the chapters on the surgery of the eye and ear that appeared in the first two editions. This we think was wise because the surgery of those organs is so distinctly "special," that it is considered in works devoted to those topics. This book is sufficiently large without those chapters.

The last chapter in the treatise is devoted to the use of the x-ray in surgery. It is illustrated by two beautiful plates and contains the most recent information on the subject. We are of the opinion that this work will long continue to hold a most prominent place in the literature of American surgery. It fits the necessities of the teacher, pupil, and the every-day practitioner of surgery in the interior or

country—sometimes called provincial—districts. Such an all-around treatise must necessarily present strong claims to the surgeon of today.

TREATISE ON ORTHOPEDIC SURGERY. By EDWARD H. BRADFORD, M. D., Surgeon to the Children's Hospital and the Samaritan Hospital; Assistant Professor of Orthopedic Surgery in Harvard Medical School; and Robert W. Lovett, M. D., Assistant Surgeon to the Children's Hospital; Surgeon to the Infants' Hospital. Illustrated with 621 engravings. Second revised edition. New York: William Wood & Company. 1899.

Bradford and Lovett have been recognised for some years as authority upon orthopedy, and when the first edition of this treatise appeared, they included therein diseases or deformities of the joints as belonging to the specialty of orthopedic surgery. This was in 1890, and later, when Young's treatise appeared (1894) he followed the same plan. It has now come to be adopted as a portion of the field legitimately attached to orthopedic literature and practice.

During the past ten years there has been much advance in this branch of the surgical art, that is to say, in the cure of deformities, no matter where they exist, but especially as involving the spine and the large joints. Deformities of the feet, too, are being studied more and more, so that gradually the unsightliness of crooked and flat-footed people is disappearing.

These authors have considered this latter subject in much detail and have presented it in the light of the latest scientific thought.

In the consideration of Pott's disease of the spine, Bradford and Lovett are exhaustive, both in pathology and treatment and have presented the latest and best methods of straightening crooked spines, concerning which there has been, in recent years, considerable change in methods, much of which is for the better. It has come to be possible, under the skilful application of the modern principles of orthopedic surgery to the young cripple, to cure or improve almost every deformity. This is one of the triumphs of surgery, not second to any other in its far-reaching results.

The illustrations in this treatise are numerous, practical, instructive and make even the novice quickly acquainted with the subjects they portray.

A TEXT-BOOK OF EMBRYOLOGY. FOR STUDENTS OF MEDICINE. By JOHN CLEMENT HEISLER, M. D., Professor of Anatomy in the Medico-Chirurgical College, Philadelphia. With 190 illustrations, 26 of them in colors. Philadelphia: W. B. Saunders, 925 Walnut street, 1899.

The study of embryology has acquired such great interest in connection with the teaching and proper comprehension of human anatomy in recent years that a demand has arisen for compact comprehensive works on this subject. The author as a teacher has been awake to this demand and has prepared a work sufficient to meet the demands and exigencies of the hour, and the result is a carefully prepared statement of the essentials of embryology.

The book is divided into eighteen chapters, chapter I. taking up the male and female sexual elements; maturation; ovulation; menstruation and fertilisation.

In chapter II. he deals with the segmentation of the ovum and formation of the blastodermic vesicle. In chapter III. is considered the germ layers and the primitive streak or the stage of the gastrula. Chapter IV. treats of the beginning differentiation of the embryo; the neural canal; the chorda dorsalis and the mesoblastic somites. Chapter V. describes the formation of the body wall of the intestinal canal, and of the fetal membranes. Chapter VI. treats of the decidua, the placenta and the umbilical cord. Chapter VII. deals with the development of the external form of the body. In the succeeding chapters the author treats of the development of the connective tissue of the body, and the lymphatic system; face and mouth cavity, vascular system, digestive system, respiratory system, genito-urinary system, nervous system, skin and appendages, sense organs, muscular system, and development of the skeleton and limbs.

A very instructive tabulated chronology of development follows, showing the extent of development at the end of each week up to the tenth week, and then of the months following, proving very helpful to those who desire to know the exact development at a certain period.

The book, on the whole, is an excellent one, and can be recommended as a text-book or work of reference to the busy practitioner. The illustrations are of a high order of merit, the full page colored plates being very elucidating and handsomely executed. Paper, binding and press-work are all first-class.

A POCKET TEXT-BOOK OF HISTOLOGY AND PATHOLOGY. By JOHN BENJAMIN NICHOLS, Demonstrator of Histology, Medical Department Columbian University, Washington, D. C., and FRANK PALMER VALE, Demonstrator of Anatomy and Instructor of Surgery, College of Physicians and Surgeons, Columbia University, New York. Series edited by Bern B. Galaudet, M. D. Illustrated with 213 engravings. Philadelphia and New York: Lea Brothers & Co. 1900.

This volume presents compactly, clearly, authoritatively and at a very moderate price, the essentials of two important subjects which illuminate each other. The normal structure of the tissues is a standard by which morbid changes can be recognised and measured. Pathology steps in after histology, and regarding each disease as an entity, describes its nature, signs, course and effects, thus yielding an understanding indispensable as a prerequisite to the practice of medicine. Drs. Nichols and Vale have summarised these two sciences in their interrelations, and have presented a manual which is handsomely illustrated, thoroughly up-to-date, and serviceable alike to the practitioner and the student.

The part on normal histology is written entirely by Dr. Nichols and is an excellent exposition of the facts clearly established regarding one of the most important of medical sciences. The author does not

take up the consideration of practical methods, but wisely refers to the numerous special works on that subject. The chapters on the cell reproduction and development are carefully prepared and accompanied by illustrations alike beneficial and illustrative. In fact one of the strong points of the work is the good judgment shown in the selection of illustrations. They are all excellent and point out what the author intends they shall stand for. Nothing can be clearer than the plate on page 35, showing a diagrammatic representation of the stages of karyokinesis, after Flemming, or the diagrammatic sketch of the human kidney, on page 159. The text is well written, rhetoric is well adapted to the class of readers for which this series is intended and no doubt will become a popular series of text-books.

The part on pathology is written by Dr. Vale, who divides it into general pathology in which he treats of the pathology of the blood and circulation, and the pathology of nutrition. Part two deals with special pathology as the diseases of the blood, circulatory system, respiratory organs, gastro-intestinal tract, urinary organs and the nervous system. Here again, as in the part on histology, the illustrations are wisely chosen, particularly the appearances of the corpuscles in circulation, and the spinal cord sections in the chapter on Diseases of the spinal cord.

The authors do not profess to do more than give a résumé of the knowledge of these two subjects and they have succeeded admirably.

The book is handsomely bound, in fact is an ideal binding—bright, durable and catchy. The paper is first-class and the press work up to Lea Brothers' best.

W. C. K.

A PRACTICAL TREATISE ON MATERIA MEDICA AND THERAPEUTICS. By ROBERTS BARTHOLOW, M. A., M. D., LL. D., Professor Emeritus of Materia Medica, General Therapeutics and Hygiene in the Jefferson Medical College of Philadelphia; formerly professor of Materia Medica and Therapeutics and of the Practice of Medicine in the Medical College of Ohio, etc., etc. Tenth edition, revised and enlarged. Octavo, pp. xxii.-866. New York: D. Appleton & Co. 1899.

Roberts Bartholow has been acknowledged so long an authority upon the subjects of which this book treats, that it seems almost a work of supererogation to print any critique or review of it; especially does this so appear when its tenth edition is offered for examination.

The first edition of Bartholow's treatise was published in 1876, when the literature on this subject was much sparser than now, particularly as regards American works. Stillé and H. C. Wood, it is true, had put forth excellent books and these together with Ringer's therapeutics, constituted the student's resources as well as the practitioner's stock. Bartholow, therefore, found a ready ear and a willing purse, for at once his book took position in the front rank, a place that it has continued to hold with ease and credit.

The ninth edition was sent out in 1896 and three years later this present edition was called for. Notwithstanding the fact that

numerous authors are now in the field, this treatise continues to be listed as a text-book by the colleges, and is always popular with students and teachers. The author has kept it fresh by additions and changes, always taking up the newer remedies and discussing them with intelligence, and eliminating the obsolete as fast as they have become so. This has served to maintain uniformity in the size of the book through its several editions, which is convenient, not overgrown, nor yet too small; since it always has ample space for the discussion of all important details, and is yet not too bulky to be handled with ease.

The near approach of the decennial revision of the United States Pharmacopeia makes it important that all views of authors shall be well in hand regarding newer remedies and, in our opinion, those of Bartholow will carry great weight with the committee of revision.

MALSBARY'S PRACTICE OF MEDICINE. A Pocket Text-Book of Theory and Practice of Medicine. By GEORGE E. MALSBARY, M. D., Assistant to the Chair of Theory and Practice of Medicine, Medical College of Ohio, Cincinnati. Just ready. In one handsome 12mo volume of 405 pages, with 45 illustrations. Cloth, \$1 75 net. Philadelphia: Lea Brothers & Company. 1899.

This is a well arranged epitomé of the salient points in the practice of medicine. It contains six chapters, with the titles as follows: Infection, diseases of the organs of digestion, diseases of the organs of respiration, diseases of the organs of circulation, diseases of the blood, and diseases of the genito-urinary organs.

This is an excellent method of classification to be employed in a small work like this, for it makes it easy of reference, each head and sub-head being printed in display type. As a rule, condensations as related to internal medicine are of little avail, but this one has considerable merit. It is prepared in a simple, direct fashion, is devoid of word-padding, and will be found valuable as a prompter in exigencies, when time must be economised.

NERVOUS AND MENTAL DISEASES. A Manual for Students and Practitioners. By CHARLES S. POTTS, M. D., Instructor in Nervous Diseases, University of Pennsylvania. LEA'S SERIES OF POCKET TEXT-BOOKS. Edited by Bern B. Gallaudet. M. D., Illustrated with 88 engravings. Philadelphia and New York: Lea Brothers & Co.

The author does not profess to place before the profession a work that will supersede the more complete text-books on neurology—but simply one that will contain all that is necessary for a working knowledge of nervous and mental diseases. It is a concise exposition of the most modern knowledge of the two closely allied subjects and will find favor among those who have not the time to delve into the larger and more complete works. The author does not take up the anatomy and histology of the nervous system to any extent—just simply enough to freshen one's memory upon points that are

essential to the proper understanding of many of the pathological conditions and the symptoms arising therefrom.

The first few chapters are devoted to the symptomatic disorders, the diseases of the peripheral nerves, of the cranial nerves, spinal nerves and meninges. The system diseases have been classified according to the neuron or neurons affected. Thus, locomotor ataxia is a disease confined usually to the sensory tract, in some cases, however, motor neurons may also suffer. Progressive muscular atrophy is a disease of the motor neurons, acute anterior paleomyelitis is described under the peripheral motor neurons, and Frederick's ataxia under the combined motor and sensory neurons. The author states that it may not be strictly accurate owing to the complicated nature of the subject, yet it is believed to be as nearly so as the present state of knowledge permits. These diseases have always been considered as being motor or sensory in character, long before the neuron theory was projected on the neurological curtain and will no doubt always remain where they were originally placed, neuron theory or no neuron theory.

A few chapters are devoted to mental diseases, not enough to do much good, but just enough to make the enquiring student ask for more.

Full attention is given to matters of general symptomatology and methods of examination, and therapeutic measures both medicinal and non-medicinal, such as electricity, massage, hydrotherapeutics, and rest cure, are thoroughly discussed in the light of the most recent discoveries and achievements.

Although especially useful for students this work will prove of great value to practitioners, posting them thoroughly in the most recent points regarding a class of diseases which are exceedingly common and important, and often puzzling.

The illustrations are well chosen and numerous.

This work is similar in appearance to Lea's Pocket Text-book series and makes a beautiful addition to the library shelf.

W. C. K.

TENTH ANNUAL REPORT OF THE STATE COMMISSION IN LUNACY, October 1, 1897, to September 30, 1898. Transmitted to the Legislature April 10, 1899. New York and Albany: Wynkoop-Hallenbeck-Crawford Co., State Printers. 1899. From Hon. Henry W. Hill, Member of Assembly, Buffalo.

This report is in the usual form of the state documents and contains important information concerning the administration of the hospitals for the insane. The president of the commission, Dr. Peter M. Wise, has had experience as superintendent of one of these hospitals, as well as long training as an assistant, hence brings practical knowledge to his duties in the commission. This document contains much that will interest alienists and neurologists, the material is well arranged, and its contents indicate improvement in the management of lunatics.

THE AMERICAN YEAR-BOOK MEDICINE OF AND SURGERY. Edited by GEORGE M. GOULD, M. D. In two handsome octavo volumes. Profusely illustrated. Cloth, \$3.00 per volume, net; half morroco, \$3.75 per volume, net. Philadelphia: W. B. Saunders, Publisher, 925 Walnut Street. 1900.

This annual summary of medicine and surgery is published in two volumes this year, because it is more convenient to handle in that form. We think this is a good plan for that reason as well as for another—namely, it enables one to purchase either or both volumes according to fancy or purse.

Some editorial changes have been made in several of the departments, but the general plan of the work remains unchanged. It is an excellent résumé of the literature of the year 1899, and will be found convenient as a book of reference by every busy physician. The price, too, is reasonable, while mechanically the book is faultless for a work of its class.

TRANSACTIONS OF THE RHODE ISLAND MEDICAL SOCIETY. Volume V. Parts III, IV and V. Providence: SNOW & FARNHAM. 1896-97-98.

The transactions of this society are published in parts bound in paper. They contain much of interest from a scientific viewpoint, and deserve to be sent out in more enduring form. The society holds its meetings quarterly, hence four meetings are essential to create a "part." Beginning with 1900 the proceedings will be published in the journal of the society, lately established.

TRANSACTIONS OF THE STATE MEDICAL SOCIETY OF WISCONSIN, Vol. XXXIII, for the year 1899. Edited by CHARLES S. SHELDON, Secretary. Madison: Tracy Gibbs & Co. 1899.

This book contains the proceedings of the society had at Oshkosh, May 3, 4, and 5, 1899. The meeting was an interesting one and its business, executive and scientific, is well recorded. By vote at the previous meeting the professional papers were limited to fifty, with a view of expanding the discussions. But this limitation was found to be insufficient to accomplish the desired purpose, even with sessions beginning at 8 o'clock a. m., so, for the present year the papers are limited to thirty-five, in hopes to more satisfactorily meet the end in view. Under the new plan the program committee invites twenty-five members to read papers, and will accept ten volunteer communications selected in competition from the whole number offered. This is something unique in the conduct of State medical societies, and the result will be watched with interest.

TRANSACTIONS OF THE AMERICAN DERMATOLOGICAL ASSOCIATION at its Twenty-second Annual Meeting, held in Princeton, N. J., May 31 and June 1, and in New York City, June 2, 1899. JOHN T. BOWEN, M. D., Secretary. Concord, N. H.: The Rumford Press. 1899.

This excellent association is noted for the quality of its work, and is content to publish its annual volume in a very modest way. We are persuaded, however, that the scientific worth attached to its meet-

ings would justify that greater degree of permanency which boards and muslin would afford its publications. Paper covers do not find a ready place in one's library. At the meeting herein recorded, Dr. J. Nevins Hyde, of Chicago, served as president, and everything was done with accuracy and had scientific value. There are numerous half-tone illustrations that demonstrate interesting and rare conditions. The camera has aided dermatology quite as much as, if not more than, any specialty in medicine.

TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF WEST VIRGINIA, held at Weston, May 17, 18 and 19, 1899. Wheeling: Daily Intelligencer Steam and Job Press. 1899.

This society was instituted in 1867. The modest volume of proceedings is worthy of a place among those of states of similar size and age. The president at this meeting was Dr. John L. Dickey, of Wheeling, and the secretary was Dr. G. A. Aschman, of the same city. Seventeen new members were admitted, and the next meeting will be held at Morgantown, the date of which does not appear in the book.

TRANSACTIONS OF THE WYOMING STATE MEDICAL SOCIETY. First Annual and Second Regular Meetings, held at Rawlins and Rock Springs, May and November, 1898. E. STUVER, M.D., Secretary. Denver: App Engraving and Printing Company. 1899.

These two brochures bound together contain the reports of the proceedings held at the first and second meetings of this society. The first meeting was for organisation and the report is devoid of scientific work. The second regular meeting was really the first annual meeting, and at this several papers of interest were read and discussed. It is an excellent plan for a society to publish its work from the first, no matter how meager it may be, for it will always then be found accessible for reference.

TRANSACTIONS OF THE OHIO STATE MEDICAL SOCIETY. Fifty-fourth Annual Meeting, held at Springfield, May 10-12, 1899. Edited by P. MAXWELL FOSHAY, M. D. Cleveland: J. B. Savage. 1899.

The medical profession in Ohio is a progressive body, a fact amply attested by the volume before us. It contains much of scientific interest and it is well put together. The president at this meeting, Dr. N. R. Coleman, of Columbus, chose for the subject of his address, The relation of medicine to the state. This is a timely topic, which was most admirably presented. Dr. Coleman is president of the Ohio State Board of Examination and Registration, hence is familiar with the subject from every viewpoint. He was chairman of the committee on minimum standards of the National Confederation of State Medical Examining Boards, and under his direction this committee last year made a most exhaustive report, published in the JOURNAL, August, 1899.

This excellent volume of society transactions is full of evidence that it was presided over by an officer of great executive capacity.

TRANSACTIONS OF THE TEXAS STATE MEDICAL ASSOCIATION. Thirty-first Annual Session, held at San Antonio, April 25, 26, 27 and 28, 1899. Edited by HAMILTON A. WEST, M. D., Secretary. Austin: Von Boeckmann, Schutze & Co. 1899.

The State Medical Association of Texas has been noted for its good work for many years as well as for the excellent manner in which it is published; all of which testifies to the efficiency of its secretary. Furthermore, it gives strong evidence of the propriety of retaining the services of a good secretary as long as they can be secured. It is not easy to train a new one, and this post is one where experience counts for much.

The Texas State Medical Association is to be congratulated in having such a secretary, and upon its excellent book of transactions for the year 1899.

TRANSACTIONS OF THE MEDICAL ASSOCIATION OF CENTRAL NEW YORK. Thirty-first annual meeting held at Auburn, N. Y., October 18, 1898. WILLIAM C. KRAUSS, M. D., Editor. Volume V. Buffalo: Buffalo Medical Journal Print. 1899.

This progressive society presents its work in excellent form, which is an important point in the successful conduct of such a body. When a society allows its work to scatter hither and yon among the medical journals, or perhaps allows some of it to lapse without publication it loses a strong element of cohesive power. If these five volumes are now bound together, they will make a handsome book, which is well indexed in this number.

EIGHTEENTH ANNUAL REPORT of the State Board of Health of New York, for the year 1897. Transmitted to the legislature, February 15, 1898. In two volumes. Albany: Wynkoop-Hallenbeck-Crawford Co. 1898.

These volumes follow the lines usually laid down by a state health report. They contain the stereotyped "report" to the governor, which is a summary of the work of the board for the year, followed by a detailed recital of the specific application of that work, local, general, and technical.

We would suggest that it would be in good form instead of addressing the report to governor A or governor B, whose terms of office are comparatively short, and, as in the present instance, may have ceased before it is printed, that it be addressed "To the Governor of the State of New York," an office that is perpetual.

It would appear also, that such an important document might discuss, with propriety, important sanitary problems, such for example, as the state care of the consumptive. In the period embraced by this document, it is stated that consumption destroyed 12,650 lives—more than 1,000 a month. Surely, some plan should be devised by an intelligent community to put a check to the ravages of such a frightful malady.

The second volume of the report contains the maps of the sewer

system and sewage disposal works of the several villages that have been inspected during the year. The board is doing a work of vast benefit to the state, but is compelled to restrict its sphere on account of meager appropriations of money.

BOOKS RECEIVED.

Veneral Diseases, their Complications and Sequelæ. By Edward L. Keyes, A. M., M. D., and Charles H. Chetwood, M. D. One volume 8vo. Extra muslin, \$2.75, net. New York: William Wood & Co. 1900.

A Pocket Medical Dictionary, giving the pronunciation and definition of the principal words used in medicine and the collateral sciences, including very complete tables of clinical eponymic terms; of the arteries, muscles, nerves, bacteria, bacilli, micrococci, spirilla and thermometric scales; and a dose-list of drugs and their preparations in both the English and metric systems of weights and measures. By George M. Gould, A. M., M. D. Fourth edition, revised and enlarged, containing 30,000 words, Philadelphia: P. Blakiston's Son & Co. 1900. Price, \$1.00.

Diseases of the Nose and Throat. By J. Price Brown, M. B., L.R.C.P.E., Member of the College of Physicians and Surgeons of Ontario; Laryngologist to the Toronto Western Hospital; Laryngologist to the Protestant Orphans' Home; Fellow of the American Laryngological, Rhinological, and Otological Society; Member of the British Medical Association, the Pan-American Medical Congress, the Canadian Medical Association, the Ontario Medical Association, etc., etc. Illustrated with 159 engravings, including six full-page color-plates and nine color-cuts in the text, many of them original. 6¼ x 9¼ inches. Pages xvi.-470. Extra cloth, \$3 50, net. Philadelphia: The F. A. Davis Co., Publishers. 1900.

On Diabetes Mellitus and Glycosuria. By Emil Kleen, Ph. D., M. D. Octavo, 313 pages. Price, cloth, \$2 50, net. Philadelphia: Blakiston's Son & Co., 1012 Walnut street. 1900.

The Irrigation Treatment of Gonorrhea. Its Local Complications and Sequelæ. By Ferd. C. Valentine, M. D. One volume, 8vo, profusely illustrated. Muslin, \$2.00, net. New York: William Wood & Company. 1900.

Scattered Leaves from a Physician's Diary. A series of satirical sketches from real life, reflecting more or less upon the men who control it, by Albert Abrams, A. M., M. D. (Heidelberg), F. R. M. S., San Francisco, author of "The Antiseptic Club," etc.; pp. 60, with frontispiece. Price, 50 cents. St. Louis, Mo: Fortnightly Press Co., Publishers. 1900.

The International Text-Book of Surgery. By American and British Authors. Edited by J. Collins Warren, M. D., LL. D., Professor of Surgery in Harvard Medical School; Surgeon to the Massachusetts General Hospital; and A. Pearce Gould, M. S., F. R. C. S., Surgeon to Middlesex Hospital, and Teacher of Operative Surgery at Middlesex Hospital Medical School; Member of the Court of Examiners of the Royal College of Surgeons, England. Volume II. Regional Surgery. With 471 illustrations in the text, and eight full-page plates in colors. Philadelphia: W. B. Saunders. 1900. Price, \$5 00.

Surgical Pathology and Therapeutics. By John Collins Warren, M. D., LL. D., Professor of Surgery in Harvard University; Surgeon to the Massachusetts General Hospital. Illustrated. Second edition, with an appendix, containing an enumeration of the Scientific Aids to Surgical Diagnosis, together with a series of Sections on Regional Bacteriology. Philadelphia: W. B. Saunders. 1900.

LITERARY NOTES.

THE *Anglo-Saxon Review*, Lady Randolph Churchill's superb quarterly, in its current issue contains an article on Chinese Doctors and Medical Treatment, by Isabella L. Bishop, which abounds in many interesting details. She says among other things, that "a fashionable doctor is carried in a sedan chair by three or four bearers, who simulate great haste. He wears a most oracular expression, and is apparently always absorbed in consulting books and notes. He is received with much ceremony. If the patient be a lady a bamboo screen conceals her from him. After a prolonged examination of the 'twelve pulses' has acquainted him with all he desires to know he writes a prescription."

Some physicians in this country are pretty good imitators of this kind of a doctor, except, perhaps, the sedan chair. The entire article is interesting.

THE *Columbus Medical Journal*, heretofore for several years having been published twice a month, has returned to the monthly issue plan. We have no doubt the change is a wise one and hope our excellent Ohio contemporary will continue to reap the full measure of reward that it deserves, as a high-class medical periodical.

THE *Bookman* is publishing as a serial story for 1900, a novel by an American author, Mr. John Uri Lloyd, who, although unknown as yet as a writer of fiction, is believed to deserve a foremost place among the newer American novelists. The story is entitled, *Stringtown on the Pike*, and began in the March number of *The Bookman*, to continue through about ten issues of the magazine.

The first eight chapters indicate the general trend of the story and show its distinctively American type. The plot is laid in a Kentucky hamlet and its characters are such as might live in such a place—real live Americans. There is nothing impossible in the tale; its heroine, the Judge, the Professor, the Colonel, the Clergyman, the old villagers, and Cupe, are all probabilities in such a village and a part of its every-day life.

Mr. Lloyd made a strong impression upon the literary world with "Etidorhpa" a few years ago, and his fame is likely to be enhanced by *Stringtown on the Pike*. A subscription to *The Bookman* is an excellent way to secure its early reading, besides much other material published in every number of great interest.

THE Mütter lectureship of the College of Physicians of Philadelphia for 1902-3 is under preparation, according to an announcement lately issued by the chairman, Dr. John H. Brinton.

This is a course of ten lectures instituted by the late Professor Thomas Dent Mütter, M.D., LL.D., on some Point or points in surgical pathology, to be delivered in the winter of 1902-03 before the College of Physicians of Philadelphia.

The compensation is \$600. The appointment is open to the profession at large. Applications, stating in full subjects of proposed lectures, must be made before October 1, 1900, to the Committee on the Mütter Museum, corner 13th and Locust Street, Philadelphia.

THE Samuel D. Gross prize of \$1,000 is again offered for competition. No essay which the trustees deemed worthy of the prize having been received on January 1, 1900, they hereby announce that the prize will be awarded on October 1, 1901.

The conditions annexed by the testator are that the prize "shall be awarded every five years to the writer of the best original essay, not exceeding 150 printed pages, octavo in length, illustrative of some subject in surgical pathology or surgical practice, founded upon original investigations, the candidates for the prize to be American citizens."

It is expressly stipulated that the competitor who receives the prize, shall publish his essay in book form, and that he shall deposit one copy of the work in the Samuel D. Gross Library of the Philadelphia Academy of Surgery, and that on the title page, it shall be stated that to the essay was awarded the Samuel D. Gross prize of the Philadelphia Academy of Surgery.

The essays which must be written by a single author in the English language, should be sent to the "Trustees of the Samuel D. Gross Prize of the Philadelphia Academy of Surgery, care of the College of Physicians, 219 S. 13th St., Philadelphia," on or before October 1, 1901.

Each essay must be distinguished by a motto, and accompanied by a sealed envelope bearing the same motto, and containing the name and address of the writer. No envelope will be opened except that which accompanies the successful essay. The committee will return the unsuccessful essays if reclaimed by their respective writers, or their agents, within one year. The committee reserves the right to make no award if the essays submitted are not considered worthy of the prize.

Drs. W. W. Keen, J. Ewing Mears and J. Chalmers Da Costa, are the trustees.

THE *Bibliographia Medica* is the name given a new publication, the first number of which was issued February 15, 1900. It is constructed on the plan of the *Index Medicus* which was given up for non-support. The new index will appear monthly, issued from the Institut de Bibliographie, 93 Boulevard, St. Germain, Paris. The subscription price to foreigners is sixty francs. The editor-in-chief is Dr. Marcel Baudouin. This commendable enterprise deserves the support of all progressive men in the profession of medicine.

THE Board of Trustees of the University of Pennsylvania announces that it has finally secured entire control of the *University Medical Magazine*, and that in the future it will be published under the auspices and with the support of the University. Heretofore the Magazine has been in the hands of a stock company, over which the University had no control.

Owing to the necessary delay attending the transfer of the property, and also owing to the time required for a thorough reorganisation, it will be impossible to issue numbers for January or February; the first number of the year appeared in March.

It is proposed that the magazine shall hereafter be the organ of the Department of Medicine, and that it shall be creditable to that department. In every way its readers will be kept fully informed as to the work that is being done in the clinic, the laboratory and the hospital, by the members of the teaching and hospital staff. Contributions upon subjects allied to medicine will be secured from those engaged in such work at the University.

The liberal policy adopted by the management will enable the magazine in the future to obtain at all times the most desirable material for publication. Dr. Charles H. Frazier has recently been appointed editor, and will at once assume the duties of his office.

ITEMS.

JUST as the last press work is doing on this edition of the JOURNAL we learn with deep regret, that the firm of D. Appleton Company, the famous publishing house, has been placed in the hands of a receiver. It is gratifying to be assured, however, that the embarrassment, chiefly growing out of the plan of selling books on the installment plan, is only temporary. It will be remembered that the house publishes the *New York Medical Journal*, one of our most sterling exchanges, but the *Journal* will not be interrupted in its publication. We certainly hope this great house will soon surmount all its difficulties and continue business with all its old prestige.

MR. W. GRANVILLE SMITH, the artist that painted "The Country Doctor," the celebrated picture purchased by the Arlington Chemical Company, of Yonkers, N. Y., makes an interesting announcement in relation to the painting. He has obtained from the Arlington people the necessary permission and rights, and in conjunction with Goupil & Co., of Paris, the most famous art producers in the world, will reproduce the original painting, making the size about 15x25 inches, with ample margin all around, treating the undertaking regardless of expense with a view to obtain the most artistic and elegant result possible. Each copy will be an absolute facsimile of the original, in drawing, color and tonal spirit, on the finest of heavy plate paper, mounted on heavy board, ready for the framer.

The edition will be limited to 250 copies, and each copy will have Mr. Smith's autograph signature. The cost per copy will be \$10. Any person desiring to obtain this duplicate, should address Mr. Smith at the studio, Y. M. C. A. Building, 23d St. and 4th Avenue, New York.

MESSRS. JOHN WYETH & BRO. desire to call attention to an advertisement that appears in this issue of the JOURNAL relating to Wyeth's prepared food for infants and invalids. They affirm that this food is prepared from malt, milk and cereals, that it is not a predigested food, but one that will digest itself under all conditions. Messrs. Wyeth will be glad to forward a sample and literature to any physicians who would like to give it a practical test.

THE pen carbon letter book is one of the most useful of the recent inventions offered for the convenience of physicians. With this he may write a letter in the ordinary way and preserve a facsimile copy without waste of time. On page x. of our advertising columns will be found a further reference to the appliance.

THE Palisade Manufacturing Company, at Yonkers, N. Y., has recently sent out some advertising novelties of interest. Among the group may be mentioned "The Country Doctor," the "Lactopeptine Medical Annual" and the "Essentials of Hematology." The Company especially commends the latter to the profession, as being of great practical value, accurate and modern in its statements, and a guide to blood studies for the general practitioner. This brochure will be furnished by the Company upon application.

MR. JAMES I. FELLOWS, 48 Vesey Street, New York, well-known as the manufacturer of Fellows's syrup of hypophosphates, has lately issued an attractive brochure, entitled, *The Test of Time and Experience*. It is printed on antique paper with ragged edges and contains much information, relating chiefly to diseases of the respiratory tract in which Fellows's syrup has been found beneficial. It will be sent on application to Mr. Fellows at the above address.

BUFFALO MEDICAL JOURNAL.

VOL. XXXIX.—LV.

MAY, 1900.

No. 10.

Original Communications.

RATIONAL STEPS IN THE SCIENTIFIC TREATMENT OF NERVOUS PROSTRATION, HEADACHE AND NEURALGIA.

By AMBROSE L. RANNEY, M. D., New York City.

(Concluded from April.)

CASE V.—*Nervous prostration, with chronic insomnia and mental distress and confusion.*—W. C., aged 42, minister of the Gospel, married.

Family History.—Mother living, aged 84. Father was a delicate man and had headaches. One brother and one sister have severe headaches. One brother has several times broken down in his studies from eye-pain and asthenopia.

Eye Defects.—Myopic astigmatism, O. D.—1.25 c.; O. S.—0.50 c. Exophoria 10°. Crossed diplopia of 4° (with red glass before either eye). No hyperphoria. Adduction, 18°. Abduction, 12°. Right sursumduction, 3°. Left sursumduction, 3°. Presbyopia (uses + 1.00 s. for reading).

History of Case.—This patient was never a very strong man and had always been a hard student. About six years ago he began to suffer from sleeplessness, confusion of thought, and an utter inability to apply himself to his work for more than a few minutes at a time. He put himself in the care of a prominent physician of this city, and at that time was examined by an oculist of note, who prescribed glasses to correct his astigmatism. These gave some temporary relief, but he soon broke down completely, resigned his position, and for many months was unable to do any work. After a long rest, he again took charge of a church, but his insomnia soon became so severe that an extended vacation was necessary. Since that time, by the most regular habits, careful diet, and daily exercise in the open air, he had been able to keep his position, although he feared a collapse at any moment. Finally, his loss of sleep, distress in his head (although he had no actual headache), and confusion of thought became so constant that he was again on the verge of resigning his position when he came to me for treatment.

Treatment and Results.—The treatment of this case consisted simply of two graduated tenotomies for the relief of the exophoria, and subsequently a reading-glass to correct his presbyopia. The result of this treatment was most gratifying. A report received from the patient within three weeks after the first tenotomy states that he "now sleeps well, and has great relief from the distress which he has so long experienced in his head."

For several years past he has been doing his work with comfort, and with no return of his old symptoms. He sleeps well, with the exception of an occasional poor night after an unusually trying day's work. He has taken no medicinal treatment.

During a visit at my office, within a few months, he stated that "he considered himself entirely cured of his old troubles."

Case VI.—*Sudden physical and nervous collapse, preceded by sleeplessness and mental distress.*—A. C. H., aged 46, manufacturer, married.

Family History.—Both parents lived to seventy-six years. Two paternal uncles died of phthisis. No hereditary tendency to nervous diseases.

Eye Defects.—Vision $\frac{4}{8}$ without atropine. Under atropine, a latent hypermetropia of +1.00 s. in each eye. Patient had never used a glass for reading. Esophoria, 5° (after using prismatic glasses for a short time, the patient showed esophoria of 13°). Adduction, 24°. Abduction, 4°+. Later on the adduction exceeded 50°, and the abduction fell to 0. Homonymous diplopia with the red glass over one eye was usually present, and at times without the red glass.

History of Case.—This patient had been a perfectly well man and had carried on a very large business up to fifteen years ago. At this time, while attending a sale in New York, he was suddenly seized with a dizziness, faintness, and a sore feeling in his head. These symptoms lasted for three years in spite of all treatment, during which time he suffered severely from sleeplessness, extreme nervousness, and soreness in his head. He was unable to look out of a car window while traveling without great distress. He had suffered all his life from obstinate constipation, and had taken cathartics so regularly that now any cathartic water causes intestinal hemorrhage. When this patient first came to me he was able, by the most careful diet, regular habits, and by retiring at eight or nine o'clock, to carry on his enormous business only with the greatest difficulty because of the following symptoms: inability to sleep at night, which at times was very distressing and persistent; extreme nervousness after the slightest fatigue; mental depression without any cause; hot flashes up and down his spine; pain in his shoulders and across his back. His insomnia was often prolonged and very exhausting after any slight excitement or fatigue.

Treatment and Results.—The treatment of this patient consisted at first of the wearing of prisms to relieve the esophoria, and later on of graduated tenotomies on both internal recti. Subsequently,

+0.50 s. glasses were given for constant wear, and +1.00 s. glasses for near work. The distance glasses he soon discarded, as they annoyed him greatly. The improvement in his condition was marked and continuous from the first. An extract from a letter received from him two months after the operation on his eyes speaks for itself. He says: "Seemingly I am all right, feeling better every day; have not had a headache for a month; appetite good and I sleep well." Over eight years have now elapsed without any return of his former ill health, during which time he has constantly been engaged in active business pursuits. During these eight years I have seen this patient frequently at my office. His eye-tests remain unchanged from those obtained after the last tenotomy, and are as nearly normal as it is possible to make them.

Case VII.—*Nervous prostration, headache, insomnia and confinement to bed for nearly one year.*—Mrs. W., aged 55. Married.

Eye Defects.—Hypermetropia, +1.75 s. Presbyopia (uses +4.50 s. for reading). Esophoria, 7°. Adduction, 23°. Abduction, 3°+. Later on she disclosed: Right hyperphoria, 3°; right sursumduction, 6°+; left sursumduction, 2°—.

History of Case.—This patient is the wife of a prominent physician, and, as such, has had the benefit of the best medical talent of the state in which she resides. She had always been a delicate woman up to the time when my professional opinion of the case was asked. For a year or more before I first saw her she had been a victim to nervous prostration and confined most of the time to her bed or room. Her life had been despaired of during this interval at times and the case seemed to present problems in diagnosis which puzzled the best medical men whom she had consulted. When she had gained sufficient strength to allow of her being moved with safety, her husband was advised to take her to a Southern climate. On her way to Florida he was advised to consult me in reference to the case, when he passed through New York.

When I first saw this patient she was in a state of extreme physical and mental depression, was unable to walk for even short distances without great fatigue, was sleepless and despondent, and was brought to my office in a carriage from a hotel not far from my residence.

Treatment and Results.—At the first visit prisms were given to relieve the esophoria, and in five days a graduated tenotomy was done on one internal rectus. The patient began to feel the benefit of this step from the first. The second day after the tenotomy she reported that she had walked a mile and a half—a thing she had not done for over a year. Five days after the first tenotomy, a second one was performed on the other internal rectus, prisms having been worn in the meantime. Two days following this the patient walked five miles, visited an art museum in the morning, and attended a theatre in the evening. In spite of the unusual fatigue and excitement, she was still sleeping well and feeling stronger than for many years. With the improvement of her general health came an entire cessation of an

obstinate bladder trouble, which had given her annoyance for many years, and was probably due to her weak muscular and nervous condition. The pain in the bladder, which was probably of the neuralgic type, ceased after the relief of the eye tension, and has never returned.

After an interval of four months, during which she had been comparatively well, she returned to New York to complete her treatment. A high degree of hyperphoria was found, and prisms were combined with her hypermetropic glasses to relieve it. With these glasses the patient passed eight months of almost absolute freedom from distress of any kind, when a graduated tenotomy was performed and the hyperphoria prisms removed. She reported later that she was sleeping well, was able to attend to her household duties, could walk long distances, had taken no medicine for over a year, and was regarded by her husband and friends as restored to perfect health. No relapse of her old symptoms has ever occurred.

Case VIII.—*Constant headache for several years, and inability to use the eyes without greatly intensifying the pain.*—Miss F., single, aged 19. This young lady was brought to my office by her uncle, a physician, who had tried all remedies to relieve her headaches without any benefit. The pain was chiefly in the occipital region, and was constant both day and night. Whenever she tried to use her eyes, the pain became more intense. As she was desirous of becoming a teacher, her chance of being self-supporting in that field seemed far distant. She had been treated for the anemia that was very apparent; her organs had been examined and found to be free from disease; her bowels' action was normal; her menstruation regular, and no apparent cause existed to explain her long-continued suffering.

An examination of the eyes disclosed apparent emmetropia and she tolerated no plus-glasses, but under atropine a very low grade of hypermetropia was found. She was prescribed prisms for esophoria. At once she felt somewhat relieved, and she reported the next day that the glasses were very comforting to her. Within a month, I performed graduated tenotomies upon both the interni, as a high degree of "latent" esophoria manifested itself. Within a week after the last operation the pain in the head ceased, and the patient rapidly regained her strength, weight and color.

Several years have elapsed since then, yet this patient continues to be free from pain and has become a strong, robust, healthy woman. She has not yet worn glasses. Her ability to use her eyes without them and the entire disappearance of pain, leave no ground for me to prescribe them either for reading or constant use.

Case IX.—*Complete nervous prostration, loss of memory and inability to concentrate thought. Suspected softening of the brain.*—Mr. C., married, aged 42; accountant. This is one of the most remarkable and obscure eye-cases that I have ever yet encountered. The final results obtained were far better than any one interested in the case at first hoped for or expected. The eye factors in the case were peculiarly obscure, and harder to determine satisfactorily to myself

than to correct surgically when once clearly shown. This case was in reality an "eye-puzzle"—even to one with a large experience in the solution of eye-problems.

The patient had suffered from severe headaches since boyhood; he had once had syphilis, to which most of his later troubles had been attributed by different physicians; he had a hereditary predisposition to insanity and consumption; he had for many years used his eyes and brain constantly for long hours each day; he had borne great anxieties and responsibilities in his business relations; finally he had collapsed mentally and physically and had been pronounced by a skilful diagnostician, prior to my seeing the patient, as suffering from softening of the brain.

His physical and mental breakdown was preceded for some months by insomnia, constant headache, extreme nervousness and debility. It was attributed by most physicians whom he consulted to his long hours, his great cares, and possibly to some remaining taint of specific trouble. No therapeutic measures proved of any avail and he was instructed to give up all business and to travel. He did so for some months. He returned home rather worse than improved. His constant headache, mental confusion, extreme physical weakness, and insomnia were not relieved.

This was the condition of the patient when I first examined him in my office. He had practically abandoned all drugs for some months prior to consulting me. To publish all the eye-records of this case would take more space than I am justified in giving to it here. In brief, it may be said that by lowering the right eye, raising the left, and relieving a high degree of abnormal tension upon both interni, the eyes were at last brought to a state of perfect adjustment. Perfect health was thus reestablished without the use of a drug. The refraction of this patient consisted of a moderate degree of near-sightedness and astigmatism, for which he had worn and still wears glasses.

For the past eight years this patient has remained in good health, in spite of business cares and duties that would tax the strongest individual. He sleeps well, has the clearest of intellect, has little or no headache and considers himself as permanently cured by the correction of eye-strain.

Case X.—*Terrific neuralgic paroxysms that anesthetics alone could control.*—Miss W., single; aged 18. This patient was known throughout the region in which she resided as the "screaming girl." Her piercing shrieks when attacked with general neuralgia, that occurred very frequently, could be heard for long distances in the quiet of the village where she resided; and all the physicians who were consulted could find no remedies but morphine and anesthetics to control the paroxysms. She suffered constantly from headache. When I first saw her, her vision was so poor that she used her eyes but little, and wore glasses which had been previously ordered by an oculist. She had then some evidences of conical cornea, but could get §§ vision with the glasses she was using. No modification of these glasses

seemed to improve her vision in either eye. On testing her eye muscles, it was found that she *had both vertical and homonymous diplopia*, viz.: when a red glass was placed before either eye, and the patient was instructed to look at a candle twenty feet away, unconquerable double images appeared at different heights and the image of the right eye deviated to the right.

The surgical steps required in this case to correct the double type of cross-eye consisted in lowering the left eye, raising the right eye and afterward relieving the abnormal tension of both internal recti muscles. To do this several months were devoted by me to the case, with frequent intervals of absence and travel on the part of the patient between the various steps. Since this work was performed the neuralgia paroxysms have been entirely arrested, and have not returned for over seven years.

I could multiply these ten illustrative cases many times from my case-records, if I deemed it important to do so here. But as I have recorded in my recent work, "Eye-Strain in Health and Disease," many equally striking ones with a complete record of the eye-tests of each and the steps taken to correct them, I do not deem it necessary here to greatly enlarge the number.

I have shown in this paper how six hopeless cases of nervous prostration (four of whom had alarming mental symptoms as a complication) were restored to perfect health by the surgical relief of eye-strain after drugs had accomplished nothing. I have brought forward two cases of horribly acute neuralgic paroxysms that had puzzled many physicians of repute—yet who got well at once without drugs when their eyes were properly investigated. Finally, I have given to the reader two typical cases of incessant and apparently incurable headache—that were at once cured by eye-treatment alone.

The science of eye-treatment to-day is not what it was even a decade ago. The presence or absence of equilibrium (or perfect adjustment) of the ocular muscles can be scientifically measured today, as well as the exact arcs of rotation of each eye independently of its fellow, by instruments of precision that were not perfected or used ten years ago. It is absolutely essential today to accuracy of diagnosis that such instruments of precision be used, before any opinion is final. It is no longer creditable to anyone to hastily decide concerning the presence or absence of heterophoria¹ on one or two examinations. It is impossible in some cases to unearth and positively demonstrate "latent" heterophoria without a large expenditure of time and patience—yet often success or failure hangs upon the

1. F. A. Davis Co., Philadelphia, 1897. In this work 100 consecutive cases of headache are analysed from the eye-standpoint and the results of eye-treatment are given in full.

2. See preceding table of terms used.

discovery of what a patient cannot voluntarily disclose, and which the oculist has to demonstrate by the judicious use of prismatic glasses. Because one competent observer perchance overlooks or fails to find what another may discover, is no excuse for a wholesale condemnation of a method or a groundless prejudice on the part of a disbeliever.

Each case that presents to the general practitioner obscure nervous symptoms where causation is in doubt, is apt to present also to the oculist as well some "eye problem" that cannot be solved in a minute or possibly in a month. Such patients are often unconsciously and incessantly making the best efforts that they can to overcome the defects that oculists may be looking for in ocular adjustment. These have probably existed from birth, and the patients have been trying all their lives to overcome them. Just as a man unconsciously acquires a gait to make a short leg less apparent when walking, so victims to eye-strain, are often able to simulate a closer approach to "orthophoria" than they really possess. The oculist of the largest experience in the investigation of such cases is the most apt to solve perplexing eye-problems first. I have, for example, worked two months or more over the puzzling eye-tests of some epileptic patient who presented a very complex eye-problem to decipher before I felt sure which muscle of the eye I should first readjust; while in some other cases the line of procedure would become to me equally apparent and perhaps more positive after five minutes of testing the eyes with a plain red glass.

CONCLUSIONS.

As the result of many years of personal investigation respecting the relationship of eye-strain to obscure nervous diseases and phenomena, I would offer the following résumé of my work in connection with headache, neuralgia and nervous prostration:

1. I believe that "eye-strain" is the fundamental and underlying cause of at least 90 per cent. of all headaches and neuralgias; where diabetes, uremia and other forms of toxemia can be eliminated from the list of possible causes.

2. Typical cases of "sick-headaches" in patients under forty years of age are almost invariably due to some type of eye-strain. If developing after the fortieth year, uremia and diabetes frequently are factors in headaches associated with vomiting; although an important eye-factor may co-exist with some form of toxemia (when detected)—chiefly in uncorrected hypermetropia or a loss of the power of accommodation of vision.

3. Headaches are too frequently attributed by medical men to errors of diet, torpidity of the liver, use of tobacco, etc. Cathartics will often abort attacks; and abstinence from tobacco, rich foods, and sweets may for a time decrease the frequency of sick-headaches; but the radical cure of sick-headaches is accomplished in a very large percentage of sufferers from these paroxysms by eye-treatment alone.

Personally, I spent much of my life from the age of four to thirty in bed from uncontrollable paroxysms of headache and vomiting; and when brought at last to a stage of utter physical collapse from unsuspected eye-strain, the correction of my own eye-defects restored me, as if by magic to health and a capacity for labor that I had never before known. My poor abused liver, that had been stirred up by drugs for years to abort the paroxysms of pain, must bless the day that revealed the actual cause; and the use of tobacco, to which many eminent men had attributed my sufferings, is still my solace and delight. At different times in my life my headaches had been diagnosed as due to "nicotine poisoning of the retina," cerebral congestion, fermentation of food, insufficient bile secretion, and many other speculative conditions while the actual cause was discovered by myself almost by accident, and my life's work became an outgrowth of my recovery and restoration to health.

4. The first step that should be taken by all intelligent medical practitioners of the present day in any case of headache, neuralgia or nervous prostration, is unquestionably to have the eyes of the patient examined carefully (by the latest methods) for "latent" or "manifest" errors of refraction and for "latent" anomalies of adjustment of the ocular muscles. Until such investigations are made, time is generally ill-spent in medication, and the sufferings of the patient often needlessly prolonged.

The first and second chapters of my work on Eye-strain, to which I have previously referred, will enable the general practitioner of medicine to make himself sufficiently familiar with eye-examinations either to test his own patients or to confirm the views of those specialists to whom he may refer them for an opinion.

5. No eye examination for refractive errors without the instillation of a mydriatic to dilate the pupils should be considered as final. Valuable as are ophthalmoscopic examinations, the employment of the shadow test, the use of the ophthalmometer of Javal, the reading of Snellen's test-type through trial glasses, etc., no method is absolutely accurate and positive unless the accommodation of the patient is relaxed by some mydriatic.

6. The correction of the refraction of any patient suffering from eye-strain is of vital importance in many instances, before any positive opinions can be formed regarding anomalies of the ocular muscles, it is always important to ascertain if a full refractive correction by glasses, worn constantly for a period, materially modifies or corrects the "manifest" or "latent" heterophoria.

Without a thorough investigation of refractive anomalies in any patient, all muscular tests are peculiarly apt to be open to suspicion and doubt.

7. Oculists do not all think alike. Differences of opinion in diagnosis are usually due, however, to different methods of examination employed; coupled not infrequently, however, with prejudice and undue haste in arriving at conclusions respecting complex eye-problems.

8. I believe that an enormous percentage of cases that are called "*nervous prostration*" by medical men as well as the laity are in reality nervous bankrupts from an incessant leakage of nervous force entailed by some type of eye-strain, that has probably existed from birth and that will continue until death unless scientifically investigated and arrested.

I have seen so many instances of startling recoveries of nervous power almost immediately after a correction of "esophoria" and "hyperphoria," that I cannot too strongly state my convictions here regarding the importance of investigating the eyes of patients who collapse nervously without any apparent organic disease, and who thereafter are kept alive by tonics, travel, massage, electricity, and stimulants because the underlying causes are not properly sought for and rectified.

ERRATA.—The top line of page 655 of the April JOURNAL should have read:
"One of his physicians sent him to the late Dr. Loring, the famous"

345 MADISON AVENUE, NEW YORK CITY.

THE MISSILE AND THE WEAPON.¹

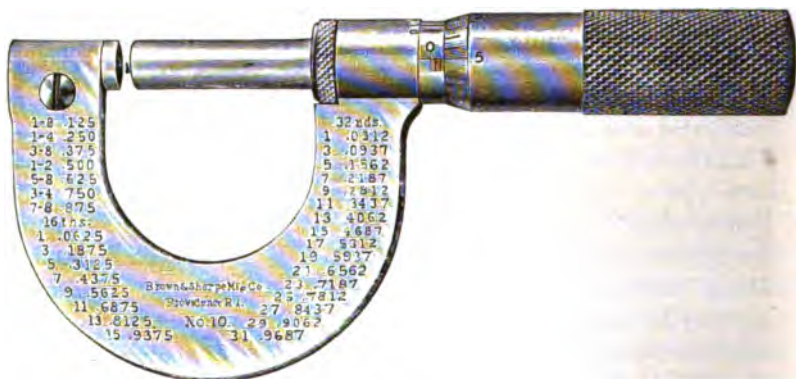
By A. L. HALL, M. D., Fairhaven, N. Y.

THE missile and the weapon having the widest use in civil life, and consequently the greatest medico-legal interest, are the conoidal bullet and the pistol. For this reason, they have been selected for a few remarks concerning what may be determined from a careful study of them. First, we will consider the missile and what may be

1. See table of eye-terms on a preceding page.

2. Read at the thirty-second annual meeting of the Medical Association of Central New York, at Syracuse, October 17, 1899.

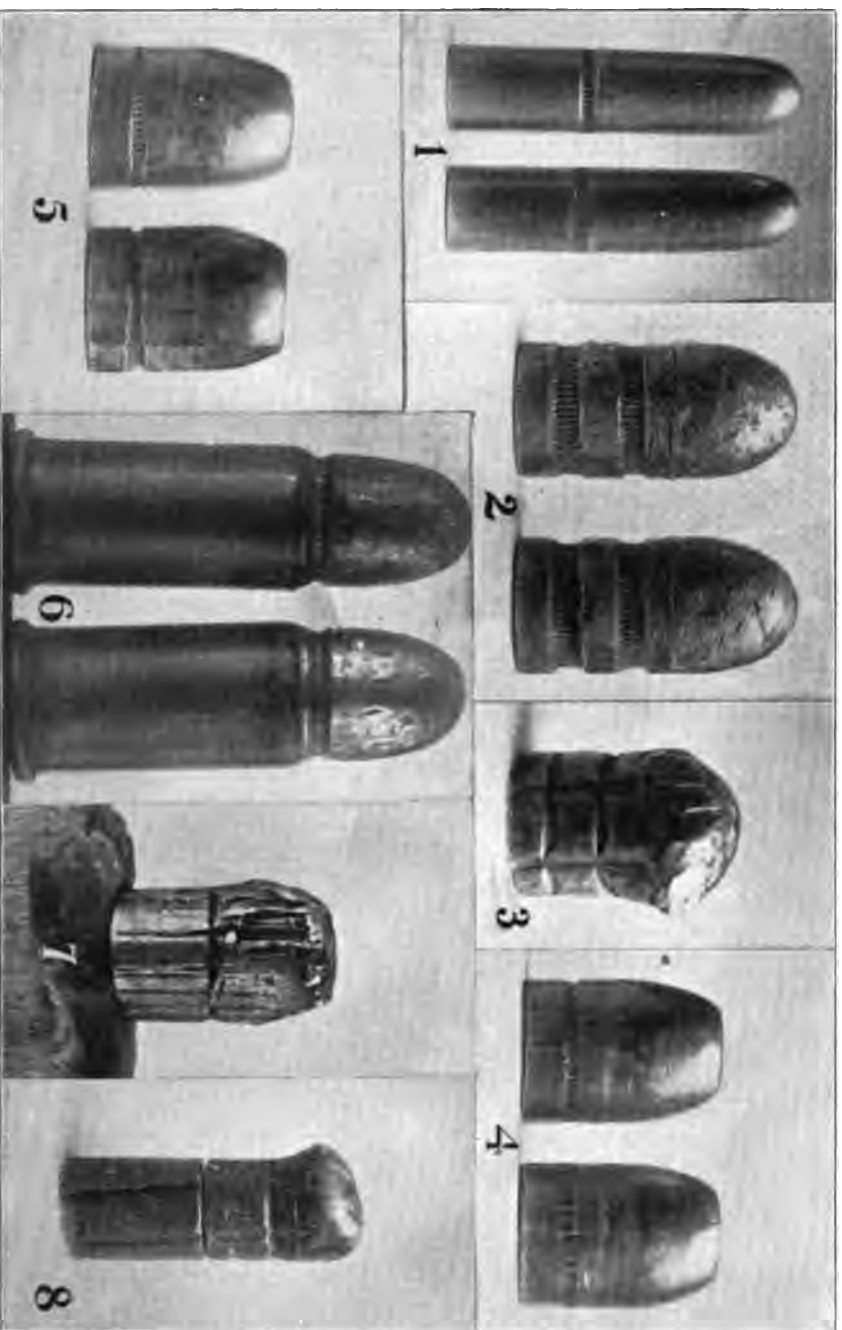
learned from it: Inspection may show tissue and blood stain, filaments of clothing, hair, lubricant, grains of unconsumed powder, dirt and so forth, clinging to its surface. These should be removed, examined microscopically and preserved for future use. After being deprived of foreign matter, the bullet should be accurately weighed, its contour noted and the effect of impact observed. Every marking should be carefully studied. Those originally present and due to manufacture, should be differentiated from those produced by bruising, as well as those caused by the rifling of the weapon. Then the bullet should be carefully measured and its length and various diameters obtained in thousandths of an inch. This will require the use of a caliper micrometer—such as now shown to you—which is a highly accurate instrument, and is manufactured by the Brown & Sharpe Manufacturing Company, of Providence, Rhode Island. A



CALIPER MICROMETER.

little patience, with some study, will easily make one competent to skillfully measure in thousandths of an inch, such measurements as are ordinarily made with this instrument.

The form, weight and caliber of the missile must necessarily be depended upon to obtain its caliber. And right here, I desire to say a word about the term caliber. As commonly understood, it means the diameter of the missile and that of the bore of the weapon. Thus the various calibers are known as twenty-two, thirty-two, thirty-eight and so forth. It being intended by these designations to convey the idea that these calibers are really so many hundredths of an inch. This is only a convenient approximation. Such a thing as an actual 22-caliber bullet, or weapon, measuring 22-100ths of an inch, is difficult, or impossible to find, except occasionally in rim-fire



HAL—THE MISSILE AND THE WEAPON.

cartridges. And what has been said respecting the 22-calibers is equally true of the other calibers. A 38-calibered Smith and Wesson pistol measures only 350-1000ths of an inch and a properly fitting bullet measures 360-1000ths of an inch. A 38 Colt's army revolver has a bore of 363-1000ths of an inch and its bullet calipers only 350-1000ths of an inch. In the Smith and Wesson pistol the bullet is larger than the bore of the weapon, and in the case of the Colt's, it is smaller than the bore and easily drops through it. The reason for these differences, I will not stop to explain, but will pertinently remind you, that if a fairly-well preserved bullet is found having a diameter of 360-1000ths of an inch, or a close approximation thereto, you may safely conclude that you have a 38-caliber missile. And if there are distinct rifling marks upon it, you may be certain that it came from a 38-calibered weapon.

Having determined the caliber, the further identification of the missile may be undertaken. For this purpose nothing is more important than the discovery of the original markings, or the so-called "details" of the bullet, which have been produced during the process of manufacture. The principal markings are known as the cannelluring, knurling and cupping, which I will briefly explain. (See plate, Figs. 1 and 2.) Usually, bullets have one or more grooves encircling the body, either within or without the shell of the cartridge for holding the lubricant, known as the cannellure. In most of instances, the cannellure has transverse markings resembling the milling upon the edge of coins, or the marking of the bark of a tree may be imitated. These markings are technically known as knurls. The cupping is the basal depression which is usually present in most of bullets. The cannellure with its knurls and the cupping should be carefully examined. If lubricant is present it should be removed and its composition determined. The form, width and depth of the cannellure should be noted, and the number and direction of its knurls, together with any special peculiarities should be observed. The deciphering of these markings is a slow process and requires considerable toil and patience, but the result will, when carefully worked out, not only reward the investigator, but he will be actually surprised at the value of his findings.

In a good many bullets the knurling may be faulty and in part broken, or a portion absent. I have observed this in a large series of bullets of the same manufacture, which was occasioned by faulty machinery. This instead of being an obstacle to identification, may prove a strong aid. The importance of this is better comprehended,

when it is known that bullets from the various manufacturing concerns throughout the country, when made in accordance with the specifications furnished by the weapon manufacturer, vary widely in the minute details which go to make up the cannellure, knurling and cupping. A study of the bullets, as found in the fixed ammunition offered for sale, will satisfy you that this is true.

In the study of the bullet details, or markings, a good Coddington lens is a desirable help, and many times the low powers of a microscope may be advantageously employed. In making measurements upon bullets, never use an eye-piece, or stage micrometer for correct results will seldom be obtained. Use one of the micrometers previously mentioned, or if measuring the lands made upon the bullet by the rifling of the weapon, employ a Vernier caliper.

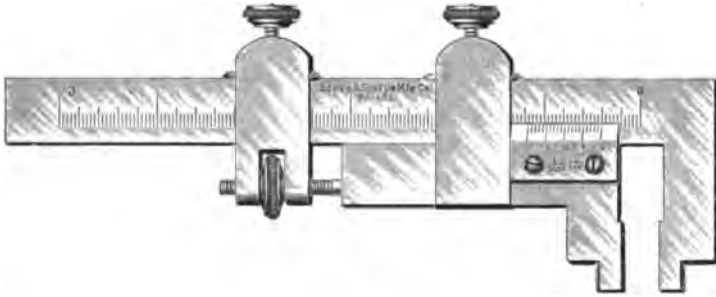
The cupping of a bullet serves as a valuable guide to identification, and experts from the manufactories depend largely upon this as an aid to recognition. The reason for this is found in the fact that the base of a bullet is the least liable to injury and deformity, hence the cupping may be preserved when the cannellure and knurling have been destroyed by the force of impact. This is especially true when the missile strikes the petrous portion of the temporal bone. The cupping may act as a receptacle and contain portions of lubricant, unburnt powder, powder smut, and so forth, and in the case of bullets, which have long been in contact with black powder, considerable oxidation will generally be observed within the cupping and upon the basal end of the bullet. Usually the finding of such material is regarded as insignificant, but nevertheless, circumstances may arise whereby it may become important.

Manufacturing experts pay but little attention to the size and depth of the cannellure and the number and direction of the knurls. Therefore, if there be nothing distinctive about the base of the bullet, they are liable to fail to identify missiles which they have manufactured. This I have known to occur with well informed manufacturing experts, when the cannellure and knurls retained sufficient distinctive markings for a positive identification.

Then, there are many bullets which have become obsolete and their source of manufacture unknown. Or the bullet may have been made outside of a manufactory and its origin thus become a matter of speculation. In such cases, and in other instances where unusual disfigurement exists, the knowledge of a person specially skilled in the recognition of disfigured bullets may be utilised with advantage.

The final step in the examination of the missile is the considera-

tion of the weapon markings. Usually, if the bullet has been fired from a rifled weapon, the rifling marks will be easily seen. These markings appear as alternate ridges and depressions extending longitudinally from the base of the bullet. When free from disfigurement, they are definite and regular in outline. The ridges are called *lands* and the spaces between the lands are known as *grooves*. At this point, it is well to explain to those who are uninformed in matters of this kind, that the rifling impression upon the bullet is the exact reverse of the weapon rifling. The land upon the bullet being produced by the groove of the weapon rifling, and the groove upon the missile by the land of the weapon. The lands of the bullet should equal in width and thickness that of the depth and width of the grooves of the weapon, while the lands of the weapon equal in width and thickness that of the depth and width of the grooves found upon the missile. The number of lands always equals the number of the



VERNIER CALIPER.

grooves. Sometimes the lands and grooves are each of like width and depth. Usually the lands are not of the same width as the grooves. Decided variations will be found in the lands and grooves of different styles of weapons, although they may be of the same caliber. Consequently, the same variations will be impressed upon the bullet, and these differences must be given careful consideration.

Having found rifling marks upon the missile, count them and measure their width by means of a Vernier caliper, such as illustrated above. The use of this instrument requires considerable skill to obtain correct results. To illustrate the method for making correct measurements and accurate computations, I offer the following problem for your consideration: Given a fired bullet, such as shown in Fig. 3, "mushroomed" by impact, but with well preserved body and base, presenting distinct rifling impressions upon its circumference and

having a series of diameter measurements closely approximating 363-1000ths of an inch. Taking 363-1000ths of an inch and multiplying it by the well-known ratio number 3.1416, the result is 1140-thousandths of an inch, which is the circumference of the bullet. There are six lands and the same number of grooves impressed upon the surface of the bullet. You observe that the lands are several times wider than the grooves. With the Vernier caliper carefully measure the lands at as many points as possible until verified measurements are obtained. Assume the measurements to show the breadth of the land to equal 160-1000ths of an inch. Six times 160-1000ths inch equals 960-1000ths inch, which is the combined width of the lands. Taking 960-1000ths of an inch from the bullet circumference—1140-1000ths inch and there remains 180-1000ths of an inch of the bullet's circumference, which must be covered by the grooves. Dividing this fraction by 6, the number of the grooves, and the result is 30-1000ths of an inch, which is the width of a single groove. To prove that the computation is correct, add together the width of the land and that of the groove. In this instance, their combined width is 190-1000ths of an inch, or one sixth of the circumference of the missile. Remember that the combined width of the land and groove in a six-grooved rifling impress upon a bullet must of necessity equal one-sixth of the circumference of the missile.

The same law hold good whatever the number of the grooves and lands may be, and applies with equal force to the rifling of the weapon. Returning to the problem, just considered, we find that the data obtained unequivocally proves that the missile came from a 38-caliber weapon whose bore, lands and grooves measure respectively 363-1000ths, 30-1000ths and 160-1000ths of an inch. With these facts to aid us, the particular kind of weapon may be determined with certainty. There are other things about the missile which have not been considered, but will be mentioned in connection with the weapon.

THE WEAPON AND WHAT MAY BE LEARNED FROM IT.

Ordinarily, many important and interesting circumstances attend the finding of a weapon which has been used to commit a crime. These, I will not mention, but will confine my remarks strictly to things which pertain to the weapon itself, making especial reference to those which serve to connect it with the missile.

A careful inspection of the weapon should be made and external staining, whether made by finger-marks, powder smut, blood and other

foreign matters, should be noted and their exact nature determined. The number of the weapon, its caliber, make, length of barrel, weight and general condition should be recorded. The next point to consider is whether the weapon has, or has not been recently discharged. If recently fired, the bore of the weapon will be covered; if black powder has been used, with a dark, semi-liquid, greasy substance, which adheres to the finger and leaves a dark stain. In addition to these signs, there will be a strong odor of sulphuretted hydrogen, which may be easily detected during the first day, and usually for two or three days longer. Exceptionally, the odor may be detected for a period of seven to ten days. The weapon may be placed in some close receptacle, or covering, immediately after firing and by these means the odor may be retained for a long period of time. The color of the stain within the barrel, for the first twelve hours, undergoes no appreciable alteration, but at the end of the first day small points of color change will be noticed in the deposit. This change gradually extends and by the end of the third or the fourth day, it has been completed and the deposit has assumed a light gray color without staining properties. This change is known as the "efflorescence" and is due to the crystallisation of the products of fired gunpowder. Under the microscope, the efflorescent material is resolved into numberless white crystals with an admixture of minute particles of unburnt powder and charcoal. If rust is present within the barrel, the crystals may be reddened from this cause. For a few days, after the completion of the crystallisation of the deposit, the interior of the barrel presents a frost-like appearance which continues until the efflorescence becomes broken down by the further chemical changes due to oxidation. Generally by the end of the first month, and sometimes before, the deposit, to the unaided eye, has lost its bristling crystalline appearance. It has become smoother through oxidation, and if not affected by weapon rust, its color is slightly lightened. When this stage has been reached, the deposit for succeeding months undergoes little, if any, appreciable change, provided moisture is absent. The microscope shows the crystals at this stage the same as during the period of completed efflorescence, and the only appreciable differences will be their increased clearness, occasioned by the casting off of the blackened products of powder combustion, which like the crystals have clustered together by themselves.

The product of black gunpowder combustion has an alkaline reaction. In a large series of carefully conducted tests, I have never failed to obtain a marked bluing of reddened litmus paper, when

moistened and brought in contact with these deposits. It is a constant peculiarity and always present, and it matters not whether the test be made immediately after firing, or if months and even years have elapsed, alkalinity is detectable, if any deposit is found within the barrel of the fire-arm. I show you an old pistol barrel, originally a part of a 22-caliber Colt's revolver which has been in my possession for more than two years. It is badly rusted, yet its interior shows, at this time, pronounced alkalinity, due to the presence of gunpowder residuum. When given to me, the ends of the barrel were filled with earthy matter and the outside was covered with fresh earth, it having been exhumed from a flower bed where it had been buried for a year. I have credible information that it has not been fired for fully fourteen years, it having been in its present broken condition during that time, and there are facts connected with its history, which render it probable that it has not been fired during the past twenty or more years. Shortly after I received this barrel, I made a test which showed it to be alkaline, and I also made a microscopic examination of the encrustation found upon the walls of its bore. These possessed the ordinary characteristics of fired gunpowder, such as have been previously described. Clear crystals, crystals discolored by the action of iron, charcoal and particles of unconsumed powder were there in abundance.

I shall not say anything concerning the chemical analysis of the deposit found within the barrel of a weapon, for the reason that the character of these deposits, as shown by microscopic examination and the litmus test, are as conclusive as any that may be obtained by chemical process.

If the weapon is a revolver, examine the cylinder and its chambers. Note evidences of firing, such as powder staining, the presence of fired shells, their number and kind, with marks of manufacture and all of their smaller details. Caliper the shells and bullets, if any are found. Weigh each bullet and the powder in each shell. Inspect the bullets carefully for peculiarities. Record the width and depth of the cupping and of the cannelures, together with the number, direction and peculiarities of the knurls. Compare these details with those found upon the fired bullet, as a means of identification, and for the purpose of showing that the fired bullet is like those found in the weapon. Take the measurements of the bore of the weapon and the diameter of its cylinder chambers, and compare these with the bullets and shells found. Inspect the rifling and note its peculiarities, and whether there has been any alteration or defacement due to rust, or

injury. Sometimes the end of the barrel may become battered, and defacement of the rifling result in such a way, that a discharged bullet, will show markings which have been caused by these injuries. Then the sights should be examined and their mode of fastening should be observed. I have known of an instance where bullet defacement resulted from the sight being driven through the rifling with the effect of invariably producing a noticeable tear upon the surface of a bullet when fired. In making an inspection of a weapon, evidence of this character should never be overlooked.

We next come to the consideration of the weapon rifling. This should be minutely inspected and the number of its lands and grooves noted. What I have previously said concerning the impress of the rifling upon the missile should be remembered. The measurement of the lands and grooves of the rifling should be taken. The following method will give accurate results: Carefully clean the rifling and lubricate with a good oil. Select a well-fitting bullet, freed from dirt and lubricant, and place it within the barrel at a distance of from one to two inches from the muzzle. Place behind it, within the barrel, a closely fitting drill rod of sufficient length. Above it place a similar piece of rod. Now rest the farther end of the lower rod against a firm support, and by a few smart blows with a hammer to the outer end of the upper rod, firmly compress the lead until it has snugly impressed itself into the grooves of the rifling. Remove the upper rod, and by a few light blows to the lower rod, expel the lead core and measure its lands with the Vernier caliper. Then by computation obtain the width of the grooves. Verify the measurements by those obtained from several plugs compressed within the rifling. Compare these measurements with those found upon the missile, and if they agree, you may be sure that the bullet was fired from this weapon, or one like it. Again, a bullet similar to the fired bullet may be lightly compressed within the rifling in imitation of a fired bullet, or a fired bullet may be recovered, in a nearly perfect condition, by firing into a bag of meal. The impressions thus obtained may be measured and compared with the lead core and the original bullet.

Photographs 4 and 5 show enlarged bullets which have been lightly compressed within the rifling. Figure 4, shows two bullets of like form, weight and caliber compressed within the same rifling. The number of the knurls and their direction differ and the cannelluring is unlike. Figure 5, shows two bullets which are precisely alike in all of their details. One has been compressed within a rifling

having narrow grooves, while the other has been similarly treated in a weapon of like caliber, but having a much wider groove. A little study of these figures will, I believe, convince you of their value as means of identification.

Figure 6 represents two cartridges of like caliber, with shells exactly alike, made by the same manufacturing concern, containing bullets similar in general form, weight and composition, and which, by the manufacturers, were supposed to have no differences. Inspection shows a wide variation in the width and depth of the cannellures, and the size, direction and number of knurls materially differ. A practical expert from the factory where these bullets were made declared that they were alike, and not until his attention was directed to the cannelluring and knurling did he perceive their differences.

Figure 7 is an enlargement of what was known as the "mortal" bullet in a recent trial for murder. The bullet was badly bruised and disfigured, but the rifling of the weapon had left some markings which conclusively proved that the defendant's pistol was the one from which it had been fired and the number and direction of its knurls, with the width and depth of its cannellure, showed it to be like the bullet found in the cartridge, shown in the left field of Fig. 6, a number of which were found in connection with the case, which belonged to the defendant. The bullets like the "mortal" bullet were 1100-1000ths of an inch in circumference and their cannellures had 42 knurls which were slightly obliqued from left to right, as shown in the illustration. The groove of the weapon rifling and that of the land upon the bullet each measured 105-1000ths of an inch. By computation, it was shown that the land upon the bullet should contain four knurls, and that each knurl should cover 26.2 thousandths of an inch. Inspection of the bullet in question disclosed four knurls within the space, or width of each of its lands, which were present only in part. Other peculiarities, discovered by microscopic examination, clearly completed the identification of the missile, and established the fact, that it was like the other bullets found in defendant's possession. The details in Fig. 7 are not so well shown as they might be, but it is the only thing of the kind, now at my command.

The subject which I have presented, is one which for its proper elucidation requires vastly more than my allotted time, and I leave it with a dissatisfied feeling of my incompetency to deal with it, as successfully as might be done under different circumstances.

UNUSUAL CONDITION OF THE SKIN AND KIDNEYS FOLLOWING AN OPERATION FOR APPENDICITIS.¹

By W. G. TAYLOR, M. D., Buffalo, N. Y.

WE ARE always interested in usual conditions because of their practical importance, but unusual conditions have an additional scientific interest. If all my patients who suffer from appendicitis had before them an array of symptoms like the following case, I would with caution advise an operation, unless the life of the patient was despaired of.

On January 7, 1896, I was called to see Miss B., aged 18—previous health good—who was suffering from appendicitis with the usual symptoms of the first stage. Dr. Frederick was called in consultation and an operation was advised and performed within eight hours after seeing the patient. The appendix was found enlarged and injected with a considerable number of adhesions already formed. Patient made apparently an excellent recovery, but after being up, however, for a month she began to have pain in the incision, at first at irregular intervals, but later all the time; it was a sharp pain extending through the back and down the right limb. Patient could not lie on the left side because of an increase of pain. She began to lose appetite and spirits, finally the stomach became irritable and it refused everything. Every remedy known for pain as drugs, counter-irritants, thermo-cautery, etc., were applied with no effect. Eight different physicians saw the case, but no definite diagnosis could be made, but opinions were expressed that it might be a nerve sewed in the wound or an adhesion attached to the under surface of the scar.

On the 5th of May, four months after the original operation, a dissection was made of the scar and a nerve removed which was thought to be the cause of the pain, but much to the disappointment of all concerned the pain continued as severe as ever. The patient at this time was able to keep only liquid beef peptonoids on the stomach, was despondent and life was a burden. Everything was done for the relief of the patient, as after the first operation, but of no avail. I had an opportunity to watch the case very closely, and it was my firm conviction that it was an adhesion, but I did not want to advise reopening the peritoneal cavity unless it was absolutely necessary, for it meant more danger and several weeks in bed to an already bed-ridden patient, and, as you all know, such advice was not the most encouraging thing in the world in mid-summer and to one who had given up all idea of getting relief.

After a great deal of urging, and a promise of relief, the patient consented to a third operation, which was done on July 7th, six months after the first operation. An adhesion was found attached to the under surface of the scar involving the omentum, about the size

1. Read at the seventy-ninth annual meeting of the Medical Society of the County of Erie, January 9, 1900.

of a piece of twine. This was removed and she has had no pain from that day to this.

Patient did well for six weeks, or as well as could be expected under the circumstances, when her stomach began to give her trouble; patient was nauseated more or less all the time and vomited several times daily. Suffered from anorexia, constipation and amenorrhea. Has menstruated but once since her last operation and then one month later. I never saw a patient who lived on so little food, the slightest thing seemed to produce fermentation. She suffered in this way for two or three months, but improved somewhat under stomach sedatives and antiseptics, but more particularly lavage of the stomach. Patient continued, however, in miserable health during the winter of '97, and had more or less nutritional disturbance.

In the spring of 1897 the kidneys, skin and bowels showed marked evidences of disturbed function. I asked for a twenty-four hour sample of urine and much to my surprise found the specific gravity 1060, the quantity for twenty-four hours being one-half pint. On the 16th of June she only passed five drams during twenty-four hours. June 18th, eight ounces; specific gravity, 1080. At this time there appeared all over her body an eruption, which to my mind showed that the skin was trying to do the work that the kidneys were expected to do. Dr. Grover Wende was called in to see the case and pronounced the condition hydrocystoma. (His report I will submit later.) This condition of high specific gravity continued for two months. July 19th, specific gravity was 1100; July 22d, specific gravity was 1090. The examination of the 1100 sample was as follows: Quantity for twenty-four hours, twenty-four ounces. Consistency, mucilaginous, poured like syrup; reaction, alkaline; color, amber; no albumin or sugar; total urea, 300 grains. Microscope showed amorphous and triple phosphates in abundance, but nothing to account for the high specific gravity. On July 23d quantity began to increase—one and one-half pints in twenty-four hours; specific gravity, 1070; July 24th, one pint; specific gravity, 1090; July 25th, one and one-half pint; specific gravity, 1070. At this time the eruption began to improve, but high specific gravity continued until about August 15th, at which time samples were delivered to Dr. J. A. Miller, for more thorough examination. His report is as follows:

Referring to my records with regard to the urine of Miss B., I find that the first sample was delivered to me on the 14th of August, 1897. The analysis was, viz.: Quantity per twenty-four hours, unknown; specific gravity on the filtered sample=1081.8. The gravity was taken with the Westphal balance. Reaction, alkaline, due to ammonia. Color, amber; albumin, sugar, bile and bile acid, absent; indican, slightly above normal. Urea,=1.25 grams per 100 c.c. Chlorine and sulphates, largely above normal. Earthy phosphates, in traces only. Alkaline phosphates above normal. The microscopical examination revealed the presence of triple phosphate crystals in large quantity, also the presence of crystals of calcium phosphate, ammonium urate, together with mucus and bladder, vaginal and urethral epithelium.

Not feeling satisfied with the above, I called for a full twenty-four hour sample. The analysis is viz.: Quantity, 465 c.c.; color, amber; odor, ammoniacal; reaction, alkaline; specific gravity by Westphal=1094.4. The total solids calculated from the gravity would be 102.27 grams in 465 c.c., or twenty-four hours. This quantity is no doubt too large, as the determination of total solids by direct evaporation and weighing shows only 72.16 grams for 465 c.c., or twenty-four hours. Urea,=5.12 grams per twenty-four hours. Uric acid,=0.14 grams per twenty-four hours. Chlorine,=2.43 grams and sulphuric acid (SO_3) 0.46 grams, phosphoric acid,=0.35 grams per twenty-four hours. A microscopical examination on this sample was not made. After a careful examination to ascertain the cause of the high gravity, I concluded that it was due to the presence of glycogen.

The method pursued for the isolation of glycogen from the urine was as follows: The urine was evaporated to a syrupy consistency and filtered; a solution of caustic potash was then added, followed by absolute alcohol, until no further precipitation occurred. The precipitate was carefully washed with alcohol, and then dissolved in acetic acid, filtered and again precipitated with absolute alcohol and thoroughly washed with alcohol. After drying over sulphuric acid the glycogen was dissolved in water. The solution thus obtained was strongly opalescent; it gave with iodine solution a red color, with basic lead acetate a white precipitate. Treated with dilute hydrochloric acid it reduced Fehling's solution after neutralization of the acid.

On November 4, 1897, at my request, patient brought a good-sized sample. The sample was faintly acid in reaction; color, amber; in appearance clear except for the presence of a slight mucus cloud. The quantity passed was 80 c.c., and had a gravity of 1023. It contained 1.6 grams of urea.

On the 22d day of April, 1898, I received another twenty-four hour sample. The total quantity was 600 c.c.; color, amber; turbid in appearance; odor, urinous; specific gravity, 1019; reaction, neutral; albumin, sugar, bile and bile acid, absent; urea, =9 grams in twenty-four hours; uric acid, =0.16 grams; indican, normal; earthy and alkaline phosphates, slightly above normal; sulphates, normal; chlorine markedly in excess. The microscopical examination showed the presence of organic debris, mucus corpuscles, bacteria in abundance, a few red blood corpuscles, a small amount of vaginal, bladder and urethral epithelium; uric acid crystals in fair abundance, ammonium urate, a few triple phosphate crystals and fungus.

I did not find any glycogen in this sample, which owing to the normal gravity was to be expected. The presence of glycogen in the urine is rare, there being very few references in the literature thereto. Glycogen itself is a white amorphous powder, tasteless and odorless. It dissolves in water to form an opalescent solution. It is insoluble in alcohol and in ether. Does not reduce Fehling's solution.

The treatment given with an aim to bring the kidneys back to a normal condition was steam baths, diuretin, infusion digitalis and malt as a tonic. The bowels came to the rescue in September and she had a most violent dysentery for a week. For the first two days bowels passed off almost hourly with large quantities of blood, but at the end of the week had only two or three movements daily. Improvement set in from this time very rapidly, and by November 4, as Dr Miller states in his report, she had a normal urine. This is the highest specific gravity on record as far as I know. I wrote Prof. Osler, of John Hopkins' University, at the time, and he replied that the highest specific gravity that he ever saw was 1060, and in this case the patient was surreptitiously putting sugar in her own urine. If it was sugar that was producing the highest specific gravity in this case we might be sceptical, but very few of us, if any, have seen glycogen, much less to know anything about it, besides she was a very sick young woman, and her symptoms were in keeping with imperfect action on the part of the liver, skin, kidneys, stomach and bowels.

Dr. Grover Wende's diagnosis of the case was :

The condition of the face, arms, chest and abdomen involve many clinical points in common with hydrocystoma. The number of lesions was not to be estimated—these were distributed with wonderful symmetry. The lesions upon the face varied in size from a pin's head to a split pea; the entire surface was covered with the small cysts, but they were most abundant below the level of the orbits, over the bridge of the nose and close to the nares. At the last named point the lesions were conjoined and appeared to be confluent, although a close inspection showed that this was not the case. Nowhere upon the face was to be discovered any inflammation of the skin or any alteration of the color of the surface surrounding the lesions, which appeared to be deeply imbedded in the skin. The vesicles were firm to the touch. The distribution over the chest was quite general and extended over the upper part of the abdomen. Most of the lesions were like those on the face, varying in size from a pin's head to a lentil; scattered here and there among the nonhyperemic lesions were some twenty-five distinct vesicles about the size of a bean which displayed marked redness at the base and appeared inflammatory. There were also a number of cysts distributed upon both arms near the shoulder, but no inflammatory lesions were to be discovered among them.

The patient states that during the time when her kidneys were secreting so small an amount of urine she was subject to profuse sweating after undue exercise. The acute attack already described began upon the nose and immediately following affected the other regions. This condition extended over a period of about four months, during which time exacerbations twice resulted. The lesions were

slow in disappearing—some of them lasted for weeks. An increased influence was experienced upon exposure to heat or after partaking of hot fluids. Unfortunately in the case under consideration there was no microscopical examination made of the tissue or even the reaction of the cyst contents was not taken. I believe the condition to be nearly identical with the disease first described by Dr. A. R. Robinson as a special form of sudamina under the name of hydrocystoma. (*Journal of Cutaneous and Genito-Urinary Diseases*, Vol. II., p. 295.) The eruption of this case differs clinically from that brought to notice by Robinson, in the fact that while his was limited to the face, this appeared on other portions of the body. Besides, the many inflammatory lesions to be seen upon the chest constitutes a feature foreign to the ordinary manifestations of hydrocystoma. The present case cannot be regarded as a typical one from an etiological standpoint, by reason of the deficient action of the kidneys, betraying a condition clearly abnormal.

In making the diagnosis of hydrocystoma in this case it was based upon the characteristic appearance of the lesions as they appeared upon the face and the want of tendency to spontaneous rupture, also the long duration of them. Diseases by which you would be likely to be confused are so few and so radically different in their appearance that there is little excuse for false conclusions. The difference between sudamina crystallina and the condition here described need hardly be considered. The lesions in sudamina are so superficial and so readily wiped off that they could not possibly be confounded with the immovable cyst of hydrocystoma and with pompholyx, which is an acute inflammatory infection of the head and feet, followed by a dry red surface, resulting from a desquamation of the epidermis. The greater resemblance between hydrocystoma and the adenoma of the sweat glands when confined to the face, lies in the fact that in the latter disease the lesions are solid, grow slowly and do not vary in size. The difference between the same condition and eczema, is that the latter tends to rupture and to leave a moist, exuding surface, while the vesicles are pin-head size, usually of uniform dimensions and always accompanied by redness of the skin and the subjective sensation of itching.

As regards this case of hydrocystoma, the question naturally arises, what is the cause of the affection? In Dr. Robinson's well-known work these cysts are alleged to be due to a disordered function of the sweat-glands. In the majority of his cases there was always a condition of hyperidrosis or some sort of derangement of the excretory glands, limited to the face and appearing in persons who were exposed to extreme heat. Laundresses are particularly liable to this condition. Hallopeau was the first to take into consideration other causes, by calling attention to the fact that the affection was more marked during the menstrual period and seemed to be equally influenced by high temperature and violent emotions. Many other cases have since been recorded in which the nerve influence was supposed to have something to do with the origin of the disease. It is quite

easy to understand that the hyperidrosis acted as the exciting cause in the present case, as the kidneys were eliminating but a small amount of fluid, requiring the skin to perform nearly all their legitimate work. From the history, as here given, and the observations made by Dr. Taylor, there is no doubt that the patient under consideration suffered from severe functional nervous derangement, so often found in young women. But why the vasomotor nerves regulating the caliber of the bloodvessels which supplied the skin area, in which the eruption was like that of the face, as in nearly all the cases heretofore reported, should allow the cysts to be limited to the facial region, or in this case should be limited to the regions mentioned, is a problem yet to be solved. My theory is that some cases of hydrocystoma are due to neurosis and that the face, being rich in nerves and blood supply presents a favorable field for the operation of the disease. Yet that does not explain the present case, since the amount of work performed by the skin, and the presence of other well-known manifestations of neuroses are so clearly abnormal. Whether all this will help us much etiologically is open to doubt. What we still want to know is what is the agent which produced the diseased function?

Cause and effect in this case were very beautifully exemplified. This patient went through a terrible mental and nervous strain, and I take it that the organic nervous system was largely accountable for the state of affairs. As a result of the shock to the organic nervous system, the digestive tract suffered first and no doubt primarily the liver. We all know that it is the great eliminator of the food stuffs, and they no doubt were thrown into the circulation in an imperfect condition for absorption, and first of all the stomach undertook to eliminate, which was shown by the anorexia and irritability. As an additional means of retention of the effected products was the amenorrhea and obstinate constipation. Elimination must take place to rid the system of this poison, or a toxemic condition would develop which would sooner or later claim our patient. Fortunately, the three great means of elimination, nature's own remedy, came to the rescue—the skin, kidneys and bowels.

The patient at the present time, three years after the first operation, is still under treatment; she suffers from constipation, does not nourish well, but holds her own in weight, has not menstruated, and as a result has more or less backache. Aside from the above she is in comparative health. I submit this paper as a report of the case under consideration, and would invite a discussion as to the causes leading up to the conditions present in this patient.

ON A FORM OF THE HAAB MAGNET.

By LUCIEN HOWE, M. D., Buffalo, N. Y.

THE main object of this brief note is to acquaint physicians of Buffalo and of Erie County with the fact that a powerful magnet for removing particles of iron from the eye has been placed at the disposal of the profession by the Board of Supervisors.

At intervals during twenty years or more, workmen from the shops and others who had been injured in this way have applied for relief at the Buffalo Eye and Ear Infirmary and partial or total blindness has often resulted in spite of every effort for relief. These unfortunates naturally swelled the dependent classes, they or their families with them becoming charges on the county. Accordingly, last year the Board of Supervisors decided it was economy to provide at least some one institution in the county with a suitable instrument for giving whatever relief was possible in the early stage. For this purpose, about \$250 was set aside from the annual appropriation. The magnet was built by Meyrowitz, of New York, and has recently been placed in position. Moreover, as it was purchased by the county, and might be needed suddenly by poor or rich alike, as one needs protection from any sudden danger, it has therefore been decided that the magnet should be made available by any legally qualified practitioner of the county for any of his patients. The sole condition is that the instrument should be manipulated only by some one thoroughly familiar with its rather complicated setting, a single wrong turn of a switch being sufficient to burn out the magnet or injure the patient.

The Infirmary, at No. 673 Michigan Street, can be called by telephone night or day—Seneca 1253—and a competent person will soon be ready to manipulate the magnet, of course without any charge. With this explanation a few words are in order concerning the subject in general and this instrument in particular.

It was an old idea that particles of iron could be removed from the eye by means of a magnet. The popular notion still is that when such a fragment is imbedded in the outer portion of the globe, it can be drawn out with the point of a knife which has been "magnetized." This, of course, is not true, the fact being that when small particles are thus lodged in the cornea they are very firmly imbedded. They are usually so minute as to offer little or no attraction to the magnet and consequently they can be removed more promptly and satisfactorily with a needle point, than in any other way. But when a fragment

of iron has been driven through the outer layers into the globe, then it becomes a serious question as to what methods can be employed for finding it, or drawing it out from the globe after it has been found. For this purpose the magnet is of undoubted value. Even small magnets of low power had served a good purpose in a limited way, a number of these having been proposed by different operators, each



THE HAAB MAGNET.

a modification of some previous form. The batteries used were of various patterns, but the electro-motive was small.

The practical use of the magnet was restricted to a small class of cases, until at the suggestion of Prof. Haab, of Zurich, a decided step was made in advance. Although he employed the same principles in about the same way, the gain was by the larger scale adopted. His first magnet was described in the *Beitrage zur Augenheilkunde*, but the one I refer to has one or two further improvements on his model.

The core of this magnet is composed of soft iron of about twenty-four and one-fourth inches long, each end tapering to a point. Around this central core there is

wound 5,387 feet of soft wire, arranged in the form of two spools. The core with the wire weighs 226 pounds. This is mounted on a heavy stand of oak, about five feet high. Unlike the original model also it is arranged with a swivel movement, permitting an adjustment of the point at any position. The current is supplied by the power line of the General Electric Company, which furnishes 500 volts, though it is necessary to reduce this to a pressure of 60 volts and a volume of eight amperes.

The very great power of this instrument can be estimated by a few

simple experiments. If one holds out a small bunch of keys a short distance away, they apparently become animate and stand up, to reach out toward the magnet. If a watch be brought within a few feet of the machine, it at once becomes magnetised and must be passed through a tedious process of demagnetisation before it will keep time again. The force of the magnet is more exactly shown by the experiments made by Haab. He suspended a piece of iron, weighing one gram in front of the magnet by means of a thread. Another thread was attached to this gram of iron, this second thread running a short distance horizontally turned over a roller, and was attached below to a small disc, on which weights could be placed. It was thus possible to measure exactly the attractive force of the magnet, upon the gram of iron, and he found that when this gram of iron was at a distance of five millimeters from the magnet,

With a current of 6.6 amp. there was a drawing power of 133 grams.
With a current of 7.2 amp. there was a drawing power of 163 grams.
With a current of 7.9 amp. there was a drawing power of 213 grams.

Comparing this attractive power with any of the older and smaller magnets, they are like flint lock muskets compared with the modern thirteen inch rifles. So much for the magnet and its strength.

A word also as to the method of using it. The patient is seated in front of the instrument, and after the eye is under the influence of cocaine, one of the tapering ends is turned so as to bring the point of the core as near as possible to the eye. If a point is required which has a more acute angle, one tip can be replaced by another of any desired form. A weak current is then turned on and gradually increased in strength. Now, when a piece of iron has been lodged in the eye and no inflammation has as yet developed, the particle is drawn from the deeper portion, outward toward the magnet, and as it does so, striking the outer coating of the globe, the patient usually experiences a sharp pain at that point. This pain is of importance as showing the presence and location of the iron, and when thus moved it is often brought into a position where it can be seen more readily than before. If the point of entrance has not had time to close, that can be found, and the foreign body brought out through the same path by which it entered. In other cases it may be necessary to make a new opening, either near the point of entrance or opposite to that. In other words, each case is, to a certain extent a law unto itself. One point, however, is all important, which is that the case should be treated *as soon as possible* after the accident. Each hour at first is precious. Within a very short time, inflamma-

tory changes begin, and the resulting exudation, with bands of adhesion, increase the difficulties in the removal. On one occasion, when a smaller magnet had failed to draw out a particle of iron which had been in the eye for some months I found that removal of the globe was necessary. After the eye was in a saucer, it was cut open, the particle was caught with the forceps, and so firm were the adhesions that as the iron was drawn away, nearly half of the interior of the globe came with it.

Although the magnet here described has been completed only about two weeks, an opportunity has already been afforded for testing its value in a case where it assisted very greatly in the removal of a piece of iron from the interior of the globe. As such accidents are constantly occurring in a manufacturing city like Buffalo, it seems proper thus to acquaint the profession here with the opportunity for saving eyes which would otherwise be lost, thus giving more prompt relief to our patients, and causing in some cases at least an ultimate saving to the treasury of the county.

183 DELAWARE AVENUE.

CHRONIC SUPPURATION OF THE MIDDLE-EAR AND CHRONIC EMPYEMA OF THE NASAL ACCESSORY SINUSES.

REPORT OF TWO CASES WITH OPERATIONS.¹

BY FRANK WHITEHILL HINKEL, A. M., M. D., Buffalo, N. Y.
Clinical Professor of laryngology, Medical Department, University of Buffalo.

I. CHRONIC SUPPURATION OF THE MIDDLE-EAR, TREATED BY THE STACKE RADICAL OPERATION THREE WEEKS SINCE.

MARY G., aged 12; examined December 27, 1899. Since infancy has had purulent inflammation of the left middle-ear with constant highly offensive discharge. Has never had pain or mastoid symptoms. Is very deaf in left ear. Has had no treatment, except cleansing and boric acid insufflation. A solution of permanganate of potassium has been used daily as a deodorant.

Examination.—A highly offensive pus filled the left auditory canal. After its removal there was seen a sodden, markedly funnel-shaped,

1. Read before the Section on Ophthalmology, Laryngology and Otology, Buffalo Academy of Medicine, March 12, 1900.

membrane at the fundus of the auditory canal with a pin-hole perforation at the deepest point. The tissues were very insensitive, and syringing through the small perforation removed cheesy offensive flakes.

January 2, 1900, at the Buffalo General Hospital, under chloroform, the membrane at the fundus of the left auditory canal was removed. No ossicles were found. A quantity of granulation tissue was curetted from the accessible walls of the tympanum. The discharge now became odorless and considerably reduced in quantity, but in spite of careful local treatment there was no further improvement.

On January 25th, I removed a moderate-sized mass of adenoids from the vault of the pharynx and again curetted the middle-ear. The membrane reformed in part, as it had done after the first operation. Tender, easily-bleeding, granulations appeared in the deeper portions of the canal and the discharge, though further diminished, again became stationary as regards quality and quantity.

February 21st, at the Buffalo General Hospital, under chloroform, the radical operation was performed by Stacke's method. After the usual mastoid incision the auricle and membranous auditory canal were separated from their bony attachment and the bony partition between the epitympanum, after thorough curettage of the exposed cavities and the auditory canal, was chiselled away, together with the upper portion of the posterior wall of the auditory canal; the mastoid incision was closed at once and healed kindly. She now hears the watch at four inches in the left ear and low whisper at fifteen feet.

Remarks.—As this case had never had thorough surgical treatment by way of the natural passages, I attempted at first to correct the diseased condition by that channel. After the second operation, as the treatment had been thorough and careful for about six weeks without cure, I advised the radical operation. As there had been no evidence of involvement of the mastoid, and it was probably sclerosed (as was found to be the case during the operation) I adopted Stacke's method of entrance to the antrum through the wall of the auditory canal rather than through the mastoid cortex. This involves less scar or depressed cicatrix than occurs in those cases where it is necessary to have free access to the mastoid cells. I have recently operated on a case of colesteatoma of the right ear, in which it was necessary to enter the enlarged antrum through the mastoid cortex by the method of Schwartz, and after removal of the foul mass that had dilated the antrum and tympanum, to remove a considerable part of the anterior and external wall of the sclerosed mastoid process, leaving a large opening behind the ear for access to and treatment of the cavity thus made. As life was at stake, cosmetic effects could not be considered as in the present case. The tenderness which followed the tentative

operations upon the case now before you disappeared after the more radical operation. You will notice how slight are the traces of the incision behind the ear. Though some granulations have occurred in the fundus of the wound, its condition is satisfactory, considering the short time that has elapsed since the operation. The general health has already begun to improve and the hearing is distinctly better. These cases often require to be kept under observation for many weeks or months after operating before the required cicatrised or dermoid condition of the walls of the middle-ear occurs.

II. CHRONIC EMPYEMA OF THE NASAL ACCESSORY SINUSES IN WHICH THE ANTRUM, FRONTAL SINUS, ETHMOID CELLS, AND SPHENOIDAL SINUS HAVE BEEN OPENED.

E. B., aged 21, was first examined June 24, 1898. He gave a history of cough since childhood, much increased the past two years, with purulent expectoration. These symptoms are increased if he lies on his left side or stoops forward. He notices at times a peculiar bitter taste when in this posture. Examination of the chest showed no lesions to account for the symptoms. There was a somewhat polypoid condition of the middle turbinated bodies in each nasal chamber, and much viscid muco-pus in the upper part of the nose and the vault of the pharynx. Trans-illumination was negative, there being darkness over both antrums and both frontal sinuses.

Puncture of the nasal walls of both antrums with Krause's trochar was followed by a discharge of curded odorless pus from each. Cleansing of the antrum by this means was kept up for sometime without permanent improvement. Later I removed the anterior extremities of both middle turbinates and opened both antrums through the canine fossa. At the time of the antral operation no pus was found in either antrum, nor was the lining mucous membrane greatly thickened. The ethmoid cells at different times were broken down by curette and forceps, and drainage secured. The discharge from the right nostril was much improved by the operations, but the left continued about the same, though the cough was improved considerably. The case passed from observation for a time.

In December, 1899, he developed pain and tenderness over the left frontal sinus. Syringing the left antrum, removed considerable pus. The right antrum was found free from pus. The pus continued in the left middle meatus, immediately after the syringing of the antrum.

A diagnosis of frontal empyema being made after careful examination, in January, 1900, at the Buffalo General Hospital, I opened the left frontal sinus through its anterior wall, and also opened the left antrum through its anterior wall and made a large opening connecting the antrum with the inferior meatus, through the nasal wall. I found no pus in either cavity at the time of operation. I am able since to probe easily the fronto-nasal duct. Recovery from both

operations was prompt, but the cough and discharge, though modified, continued. The source of pus was now distinctly localised in the upper back part of the left nasal chamber; and under cocaine, with an electric drill and sharp spoon, I made a large opening through its anterior wall into the left sphenoid sinus, washing from it a considerable amount of creamy pus. I curetted carefully the sinus walls so far as accessible. There is great improvement in the night cough, the nasal discharge and the expectoration. The discharge from the sphenoid sinus still continues, but is growing less under treatment.

Remarks.—You see how slight a scar is left from the frontal operation. The regrowing eyebrow already largely conceals the cicatrix, and when in time it loses its pinkish color, the scar will scarcely be noticeable. The probe passes easily from the inferior meatus into the antrum through the opening I have made in the antro-nasal wall. I no longer find pus in the antrum or frontal sinus. It is interesting to notice from the history of the case how the maxillary antrum, in which was found pus on experimental puncture, was found empty at the time of operation, as was the frontal sinus. The posture of the patient upon the back during the operation will account for this, these cavities being filled by drainage from the diseased sphenoid and ethmoid cells rather than by secretion from their own mucous membranes. I have elsewhere reported cases of empyema of the antrum dependent upon abscess of the frontal sinus. In this case it may be regarded as dependent upon disease of the sphenoid and ethmoid cells. The case illustrates well the obscurity and difficulty of diagnosis often met with in chronic sinus disease. My method of opening the anterior wall of the sphenoid sinus with the electric drill and sharp spoon, I have used in some half dozen cases with excellent success, both as regards the steps of the operation and benefit to the patient. The difficulty and possible dangers of the operation are obvious and need no comment. I show this case because it is probable that many cases of chronic intractable cough with purulent expectoration have a similar cause. I have several such records upon my case-book. So far as I know, the case is unique in that every nasal accessory sinus has been opened and subjected to treatment.

412 FRANKLIN STREET.

MONTREAL is reported to be contemplating the erection of a sanitarium for consumptives. Mount Royal has been suggested as a site, although this location has been objected to on account of its proximity to the city.

Society Proceedings.

BUFFALO ACADEMY OF MEDICINE.

REPORTED BY THOMAS F. DWYER, M. D., Secretary.

THE regular quarterly meeting of the Buffalo Academy of Medicine was held at the Academy parlors, Palace Arcade, Tuesday, March 20, 1900. The meeting was called to order at 8.45 p.m. by the President, Dr. M. D. MANN.

The minutes of the last quarterly meeting were read and approved.

The nomination of officers resulted as follows: For president, Dr. Marcell Hartwig; Dr. Charles Cary. For treasurer, Dr. Charles S. Jewett. For trustees, Drs. John J. Walsh, J. W. Grosvenor, A. A. Hubbell.

The council recommended the election of Drs. Charles A. Cullinane and Charles R. Borzilleri for resident membership, who were separately balloted for and duly elected Fellows of the Academy. The council reported that they had no recommendation to make in reference to change of meeting place and referred the matter back to the Academy.

It was moved by Dr. H. E. HAYD and duly seconded that the Academy remain in the present rooms and the secretary be empowered to make a new lease.

Dr. A. L. BENEDICT offered an amendment that incorporated an appreciation of the offer of the faculty of the University of Buffalo.

Dr. Arthur W. HURD offered a further amendment that a committee consisting of the trustees be appointed to select a meeting place for the Academy. This amendment was carried.

The following Assembly Bill, known as the Week's Bill was then read:

An act to amend chapter 546 of the laws of 1896, known as the state charities law, by adding an additional article thereto, to be known as Article IX.a, providing for the establishment and management of a state charitable institution for the detention, treatment, reformation and instruction of persons convicted of habitual vagrancy, drunkenness or disorderly conduct, and of persons diseased, incompetent or dangerous from the habitual use of alcoholic stimulants, opium or other narcotics.

Dr. J. W. GROSVENOR moved that the Academy recommend the passage of said bill.

Dr. DeLANCEY ROCHESTER moved that the motion be laid on the table. Carried.

An adjournment was taken to the University of Buffalo where Dr. H. R. Gaylord gave an interesting talk on the present status of recent investigations on cancer, with demonstrations by stereopticon.

Attendance, 67. Adjourned at 11 p. m.

Section on Obstetrics and Gynecology, February 27, 1900.

REPORTED BY A. J. COLTON, M. D., Secretary.

A REGULAR meeting of this section was held in the Academy parlors, February 27, 1900. The meeting was called to order by the president, Dr. H. D. INGRAHAM, at 9 p. m.

By order of the president, the minutes of the previous meeting were not read. As there were no cases to be reported or specimens presented, the essayist of the evening, Dr. EDWARD J. ILL, of Newark, N. J., by invitation, read a paper entitled,

THE INDICATION FOR AND ELECTION OF THE OPERATION FOR UTERINE MYOMA.

In presenting the subject Dr. Ill said he had not arrived at the conclusion that the mere presence of a myoma was an indication for operation, but regarded the patient's welfare as the proper guide. He then classified cases that present for operation into three groups:

(a) Those in whom life is or may be endangered directly or indirectly by the growth.

(b) Those in whom health is so impaired that life becomes a burden, though not endangered.

(c) Those in whom mentality suffers because of the presence of the tumor.

In group *a* he classed (1) the bleeding myoma; (2) the septic or sphacelated myoma; (3) the pressure producing tumor; (4) the growth that becomes strangulated by torsion or impaction; (5) extensive and recurrent inflammatory diseases of the appendages; (6) myomata in the pregnant uterus; (7) myomata in women under 30 years; (8) doubtful diagnosis; (9) attacks of peritonitis, or inflammation of the tumor; (10) the location of the tumor; (11) suspicion of malignancy; (12) excessive serous, mucus, or mucopurulent discharges; (13) severe uterine contractions at the time of menstruation, causing presentation of the tumor at the os externum and thus likely a septic

infection; (14) tumors growing after the menopause; (15) inversion of the uterus due to myomata.

In group *b*, he classed (1) large tumors of size sufficient to prevent proper exercise; (2) tumors of excessive mobility; (3) pedunculated tumors adherent to mesentery, bowel or bladder; (4) inflammatory condition of the appendages, causing pain and uneasiness; (5) excessive menstrual pain where the flow becomes obstructed; (6) pain in general.

In group *c* he classed (1) those sensitive women, usually unmarried, in middle life with growths large enough to cause unpleasant comment; (2) women whose mental conditions are such that they brood over their condition, and border on melancholia; (3) women who cannot mentally disassociate the idea of a tumor from cancer.

Dr. Ill took up each of these groups and classes, discussed each in detail, to a greater or less extent, according to its importance, and set forth his views clearly and forcefully. He then presented the contraindications for operation as follows: (1) when the patient is unaware of having a growth or any symptoms therefrom; (2) when she discovers the growth but suffers neither mentally nor physically; (3) when the symptoms are of minor importance; (4) when she can nurse herself, suffers little, and can afford to be carefully watched; (5) when she has passed the menopause, having an old, and likely calcareous, tumor causing few if any symptoms; (6) when near the menopause and can remain under observation until it is passed; (7) when suffering from other and more serious disease likely to lead to fatal results.

Dr. Ill next proceeded to discuss the choice of operation. He did not favor so-called palliative operations, and affirmed that removal of tubes and ovaries with a view to avert growth could be called neither palliative nor conservative. He also declared himself out of sympathy with ligation of the uterine arteries, the galvanic current, and the like, and said that the curette, though admissible, was a dangerous instrument. He favored the conservation of the uterus and said that normally functioning genitalia should be conserved if possible, and affirmed that the conditional point of the conservative operation should be slight mutilation of the uterus and the very complete removal of the tumor.

The author next considered in detail conservative and nonconservative operations, speaking of the vaginal and abdominal routes, and assigning to each its proper place. By each a conservative operation could be made, and by each, as well, a nonconservative. By a

combination, too, an abdomino-vaginal operation could be made. He said the vaginal route should be chosen (1) when it has been decided that conservation of the uterus is impossible; (2) when the tumor is freely movable above the linea terminalis; (3) when the vagina is wide enough for easy and comfortable access; (4) when there is complete chronic inversion of the uterus with myomata.

By the abdominal route, he said, we have choice between (1) total extirpation, and (2) supravaginal amputation. He is not partial to total extirpation, though it is indicated where malignancy is suspected, and in some other conditions. He prefers supravaginal amputation with dropping of the stump, when conditions favor this method. He said, that surgeon would prove most successful and receive the largest amount of satisfaction from his work, who strictly followed surgical principles.

DISCUSSION.

Dr. H. E. HAYD said in substance that it was the best paper on the subject he had ever heard and complimented Dr. Ill very highly on his classification of myomata. He said that some operators would remove any and all kinds of uterine tumors and growths no matter how insignificant in size or how unimportant symptomatologically. He praised the writer's technique and was glad to hear him attack the so-called conservative operation of tying the uterine arteries to arrest the growth. It also pleased him to know that Dr. Ill performed the supravaginal operation. In closing, he thanked the writer and reiterated that he had never heard a paper that delighted him so much.

Dr. C. C. FREDERICK congratulated the writer on his paper and said that he quite agreed with Dr. Ill, that all cases of myomata were not for operation. He said that those myomata not producing any unfavorable symptoms should not be removed. One case, however, he recalled where he advised against operation and afterward regretted it, the tumor becoming inoperable. This he said would not have occurred had the patient been kept under observation. Such cases need careful watching to determine when to operate. No patients upon whom he had operated had suffered return of the tumors. He advised dilating the cervix after supravaginal operations, and in closing complimented and thanked Dr. Ill for coming to Buffalo to read this paper.

Dr. S. Y. HOWELL in his remarks said the paper in itself was so complete that little was left to be discussed. He paid compliment to the essayist on his scholarly and most admirable paper and the very pleasing manner in which the subject had been presented. He said that it was eminently proper that a vote of thanks be extended to Dr. Ill, which he moved. The motion was seconded and carried.

Dr. CHARLES E. CONGDON said he did not believe in threshing over old straw and so would make no remarks on the points that had been touched upon. He, however, had seen cases of twisted pedicle wherein operation had been refused and which subsequently proceeded to fatal issue. There could be no doubt about the propriety of operating in such complications, though diagnosis might be obscure.

Dr. J. W. GROSVENOR asked if there was not a certain class of submucous tumors which were not benefited by the curette. He reported one case in his observation cured by this means.

Dr. W. W. POTTER said it was somewhat difficult to discuss a paper which so completely discusses itself. He said it would no longer do to suggest operation simply because a tumor had been diagnosed as a fibroid; it must be properly classified as to operable or nonoperable and placed in its proper group according to Dr. Ill's tables. He said the word tumor to some women sounded as badly as cancer does to others, hence one must be careful in the use of the word. He said the exposition of myomatous tumors as presented was the best that he had ever heard; that he particularly felt interested in the portion of the paper dealing with pregnancy complicated by these growths and wished to join with the other members in expressing his personal thanks to Dr. Ill.

Dr. H. D. INGRAHAM said the paper was so clear in its statements and the author so frank and honest in his convictions that it would be difficult to disagree with him. Every one, he said, believes that what the essayist has said is true.

Dr. ILL, in closing, thanked the members of the Academy for the very kind reception of his paper. In answer to Dr. Grosvenor he said that the uterus was apt to become septic after curettement. As to pregnancy mortality after operation, his statistics were that of the gynecologist rather than the general practitioner. He did not agree with Dr. Frederick as to the dilating cervix for drainage, for in his operation, he sewed up the cervix so completely that there was no chance for bleeding. Every bleeding point must be stopped, hence there must be most careful hemostasis before closure of the incision.

The meeting adjourned at 10.30 p.m. There were present 32 members.

*Section on Ophthalmology, Otology, Rhinology and Laryngology,
March 12, 1900.*

REPORTED BY RICHARD H. SATTERLEE, M. D., Secretary.

REGULAR meeting of the Section of Ophthalmology, Otology, Rhinology and Laryngology, held March 12, 1900. Meeting called to order at 8.45 p.m. Dr. RENNER in the chair.

Minutes of the last meeting were approved.

Dr. F. W. HINKEL exhibited the following cases: I. Chronic suppuration of middle-ear, treated by Stacke's mastoid operation three weeks since. II. Chronic empyema of nasal accessory sinuses, in which antrum, frontal sinus, ethmoid cells and sphenoidal sinus have been opened. (See p. 746.)

Dr. LUCIEN HOWE then presented for the consideration of the section

OUT-DOOR MEDICAL RELIEF.

He enumerated the various institutions in which relief was given to out-door patients and referring briefly to the manner in which they were conducted, passed at once to the question as to whether there is any necessity for such out-door relief, saying, "These institutions have always existed since the days of the Hospitaler Knights and apparently they will always continue to exist. Those well-managed, will be an honor to themselves, a credit to the physician and a blessing to the patients, while those that are mismanaged will always encourage pauperism, be a discredit to their officers, and but little if any advantage to the patients."

As to a second question—namely, are the dispensaries of Buffalo open to abuse? it is well to remember what this word "abuse" may mean here:

1. Disadvantages to the patient; that may be in two ways: (a) Morally, by the encouragement of pauperism in the giving of charity to the well-to-do or to the rich. (b) Physically, by exposing those who attend to the contagious diseases of other patients, to inconvenience of crowded waiting-rooms, etc.

2. There is the disadvantage to the physician. That may also be in two ways: (a) By the attendant using his position principally to increase his private practice; (b) by injuring other physicians in the cheapening of professional services.

As to division 1a, the speaker thought that in the past there had been abuses, but that could not be the case now to any extent if the regulations recently adopted by the State Board of Charities are carried out.

In spite of every precaution, some such abuses of charity by patients have occurred, and probably will occur, but this evil has been much magnified in the public mind.

In regard to the disadvantages to the patient already referred to, under 1b—namely, those due to exposure to the contagious diseases or overcrowding in waiting-rooms—while these may be factors of

importance in metropolitan dispensaries they are hardly worthy of notice in Buffalo.

The abuses which are mentioned in class 2a were discussed at length, the conclusion being that this depended largely upon the character of the institution just as standards of professional ethics would vary in individuals. The tendency is, however, even in self-defense, to avoid such abuses; for example, in one of the oldest dispensaries they have a rule which requires each member of the staff to enter in a book the name of each patient referred to an office and also to specify when it was done and exactly why.

Indeed, if this or any other phase of abuse does exist to any considerable extent it can not long continue. Those institutions which intend to comply with both the letter and the spirit of the new law will keep a sharp lookout on any that might not do so, and if that is not sufficient the visitations of the agent of the board of charities will exert a salutary effect in this, as in other ways.

The question was also raised as to why the Board of Supervisors should annually appropriate a considerable sum to the support of infirmaries. Apart from any question of philanthropy there was apparently sufficient reason because of ultimate economy. Those suffering from most diseases, either die or recover and return to work. If the poor become blind they remain forever dependent on some one, many of them being charges on the county.

A careful estimate was made of the cost of maintaining one blind person during an average lifetime, including the usual course at the Blind Asylum, the minimum cost for the entire life would be about \$8,800. If the institutions here which treat over 5,000 annually, and among them a considerable number of young children, should succeed during a whole year in saving from blindness just one child, the county could have made its appropriations in the totals of about \$4,000 dollars and still could have gained \$4,000 more by the transaction. In this estimate any gain in saving the vision of adults and consequently lessening the number of these supported more or less completely at county expense is entirely left out of the account. Where there are no such institutions, the percentage of blind is decidedly larger than where they do exist. Not only the fact of the saving, but its amount can be determined.

The following resolutions, offered by Dr. Howe, were adopted :

WHEREAS, The members of this Section of the Academy have learned that certain bills now before the Senate and Assembly deeply concern the credit of the medical profession—namely, Senate Bills No. 434, 509 and 511, and Assembly Bills No. 724, 847 and 846; and

WHEREAS, They understand that the general purpose of these bills is to give more control, and therefore more responsibility to the State Board of Charities; therefore,

Resolved, That we desire to express to our representatives in the Senate and Assembly our confidence that if such additional powers were granted to the State Board of Charities, it would be used wisely and judiciously.

Resolved, That we believe the welfare of patients and the credit of the medical profession would be safer in the hands of one central power than in the trustees of many different institutions, each making regulations for itself.

Resolved, That a copy of these resolutions be sent to our representatives in the Senate and Assembly who are now acting on the respective Judiciary Committees.

The section then adjourned.

Section on Medicine, March 13, 1900.

REPORTED BY J. C. CLEMESHA, M. D., Secretary.

THE sixth regular meeting of the Medical Section, Buffalo Academy of Medicine, was held at the Academy parlors, Market Arcade, March 13, 1900.

Meeting called to order at 8.45 p.m. Dr. E. H. LONG in the chair. After the minutes of the last meeting were read and approved, Dr. ROCHESTER reported the case of a dwarf, who entered the Sisters' Hospital complaining of difficulty in breathing. There was no rise of temperature and no physical signs of disease in chest or abdomen. In the hospital he developed an attack of facial erysipelas. The pain in the chest and shortness of breath continued and increased. Later he died, and an autopsy showed a marked pericarditis, a broncho-pneumonia, a marked double nephritis and a bladder half full of pus. At one time only did the urine show trace of albumin. The interest in the case lay in the extensive pathological lesions and the absence of symptoms and physical signs.

Dr. CHARLES CARY reported a case of pleurisy with effusion where there had been threeappings and quarts of fluid withdrawn. Examination of the chest showed extensive flatness. Exploration was attempted five times before fluid was reached. Examination of the fluid showed it loaded with cholesterin. Dr. Park operated, removing sections of four ribs and a mass which proved to be a hydatid cyst. No hooklets or scolices were found and the question was whether a diagnosis could be made of such cysts without their presence.

Dr. E. H. LONG referred to a case of chloroform narcosis in which respiration plainly ceased before the circulation, the child fortunately reviving.

The paper of the evening was read by Dr. REYNOLD W. WILCOX, of New York. The subject,

SENILE BRONCHITIS.

After noting that one-third of the cases of death in the aged were due to senile bronchitis, the question of senile involution was touched upon. Tissue changes in old age were due to three factors (a) atrophy of tissues, (b) infiltration of tissue, (c) abnormal development of connective tissue.

The immobility of the chest in the aged and the change in the position of the lungs in the chest were to be considered among others.

The sequence of bronchorrhea, bronchitis, pneumonia and tuberculosis, their symptoms and diagnosis were dwelt upon, and the essayist noted the difficulty of distinguishing clinically senile pneumonia from tuberculosis.

In the treatment of senile bronchitis, belladonna and the expectorants useful in childhood were of little value. The two drugs of first rank were strychnia and ammonium carbonate. To disinfect sputum preparations of creasote were to be used. Opium was an objectionable drug. Inhalations of eucalyptol were of value.

Massage brings about brilliant results and increases the air capacity of the lungs. A warm dry atmosphere, wool next to the skin, the bowels regulated by vegetable purgatives, are requisite for proper conduct of a case; alcohol should be avoided as also hearty evening meals.

DISCUSSION.

Dr. CARY spoke on one point which he considered had been seriously overlooked, *i. e.*, the eliminative function of the lung in old age. He considered the cause of senile bronchitis due to the elimination of morbid products by the lung and consequently a toxic disorder. The lung in the aged takes on the work of broken down kidneys. Consequently in the treatment of such a condition, baths and purgatives were indicated and the getting into action all the eliminative organs, was urgently desired.

Dr. STOCKTON stated that senile bronchitis was due to similar changes going on in the skin, kidneys and digestive apparatus. He agreed with Dr. Cary in his view of the eliminative function of the lung, and overwork as a cause of senile bronchitis. The blood is

more toxic in the aged and senile bronchitis is a disease of toxemia. The treatment consists of preserving the energy of the kidneys, the elasticity of the skin, the power of the heart and the contractility of the bloodvessels. The hot air vapor bath was one of the foremost therapeutic measures.

DR. ALLEN JONES referred to the great value of the iodides, either potassium, sodium or strontium.

Dr. ROCHESTER took into consideration two forms of senile bronchitis: (a) Serous expectoration, or little or no expectoration; (b) Mucopurulent expectoration. The general treatment in these two classes of cases the same, but the direct treatment is different. In dry cough (serous form) the iodides are useful, while in the second class the balsams are better with the addition of copaiba inhalations.

Dr. H. R. HOPKINS mentioned two classes of cases: (a) When excretion of urea is diminished; (b) when the skin and bowels did not properly exercise their functions.

As for drugs hydriodic acid is the best means of giving the iodide. Next in value is the iodide of sodium; apocynum increased the kidney function and euonymin was excellent for a tired liver.

Dr. WILCOX replied briefly and the meeting adjourned at 10.25 p.m. Members present, 60.

Progress in Medical Science.

NEUROLOGY.

CONDUCTED BY WILLIAM C. KRAUSS, M. D., Buffalo, N. Y.

THYROID EXTRACT IN INSANITY.]

DRS. MABON, superintendent, and Babcock, assistant physician (*American Journal of Insanity*, October, 1899), St. Lawrence State Hospital, make a careful review of the results obtained in the treatment of 1,032 collected cases of insanity by thyroid extract and submit the following propositions:

1. The dose of the extract depends entirely on the individual case. In some cases twenty-five grains, three times a day will be necessary to bring about a circulatory or temperature-reaction; while in others the same result may be had with the use of five grains, *t.i.d.* Each case must be a law unto itself.

2. It is essential that the patient should be placed in bed to obtain the best results, and he should be continued there during the entire treatment and for a week following its discontinuance.

3. The treatment should be continued for at least thirty days.

4. We should not be discouraged by failure in the first administration, but should resort to two, three, or more trials, if necessary.

5. The most gratifying results in thyroid treatment are to be obtained in cases of acute mania and melancholia with prolonged attacks, puerperal and climacteric insanities, stuporous states and primary dementia, particularly where these forms of mental alienation do not respond to the usual methods of treatment.

6. A high temperature-reaction is not essential, as we found the average maximum temperature in the recovered cases among men was 99.6 degrees.

7. Physical improvement is the outcome in most cases whether mental improvement takes place or not.

8. The proportion of individuals who recover under thyroid treatment and then relapse is less than the proportion that relapse after recovery from other methods of treatment. In our own series of cases, only one patient who recovered has relapsed.

RENAL DISEASE AND MENTAL DERANGEMENT.

W. L. WORCESTER, of Danvers (*American Journal of Insanity*, October, 1899,) Insane Hospital, Danvers, Mass., makes a searching inquiry into the relations between renal disease and mental derangement, presenting statistics from various sources confirming the conclusion that chronic renal disease follows essentially the same law in the sane and the insane, increasing in both with advancing years.

In considering the significance of renal disease, coincident with mental derangement, the following possibilities must, it seems to him, be taken into account:

1. The relation may be a mere coincidence. If it is true, as would seem probable from the foregoing statistics, that the frequency of disorders of the kidneys is not in very marked excess in the insane over that in the general population, it would seem probable that such is the fact in a great proportion of cases.

2. The renal disease may be the immediate cause of the mental symptoms. It may, I think, be laid down as a general proposition, that any poison which is capable of causing coma may also produce slighter degrees of mental disturbance. That the so-called uremic

condition may be the cause of active mental derangement is, I think, unquestionable. Probably such cases are more commonly seen in private than in hospital practice, as they are apt to be accompanied by such evident physical signs of renal disease as to make their nature plain, but they are occasionally found in hospitals for the insane. The mental symptoms, in the cases I have recognised, have consisted, as might perhaps be anticipated, in mental confusion, with a depressed emotional tone, and at times, a tendency to violence in the effort to escape from misunderstood surroundings or imaginary dangers.

3. The renal disease and the mental disturbance may both result from a common cause. In the few cases of "acute delirium" in which I have had an opportunity to examine the urine, it has been, I think without exception, heavily charged with albumin, and has contained large quantities of casts. The pathology of these cases is obscure, and is very possibly not the same in all the cases presenting the symptom-complex of high temperature, great motor restlessness, utter mental confusion and rapid exhaustion; but whether the disorder is primarily toxic or neuropathic, it seems to me unlikely that the starting point is in the kidneys.

The conclusions provisionally arrived at may be summarised as follows :

Renal disease, in some degree, is very common among the insane, but it is by no means certain that it is very much more common among them than in the population at large at corresponding ages.

Cases in which insanity is due simply to disease of the kidneys are rather infrequent in hospitals for the insane. Taking the term "Bright's disease" in its broadest significance, however, it is probably one of the most common causes, if not the most common, of mental derangement.

OPHTHALMOLOGY.

CONDUCTED BY ALVIN A. HUBBELL, M. D., Buffalo, N. Y.

OPERATIVE TREATMENT OF SMALL ERRORS IN THE CURVATURE OF THE CORNEA.

REYMOND, of Turin, in discussing this subject (*Klinische Monatsblätter für Augenheilkunde*, November, 1899,) says that various attempts, more or less successful, have been made to reduce the amount of astigmatism in an eye by judiciously placed incisions

in the corneo-scleral margin, and even by cautious removal of minute portions of the corneal substance; thus Baiardi, by repeated small incisions at both ends of the meridian he wishes to affect, claims to be able to reduce an astigmatism as much as 1.5D. By means of operations on the rabbit he found that the amount of effect was proportional to the size of the incision and its nearness to the center. Lucciola, of Turin, has attempted in a number of cases to reduce the amount of astigmatism present after cataract extraction, by means of incisions running very obliquely through the extreme periphery; these appear to have the effect rather of increasing the curvature in the affected meridian during the next day—a result, it will be noticed, which is exactly contrary to that of incision through clear cornea. Lans has made a series of very interesting investigations regarding the effects produced by nonperforating wounds of the cornea in rabbits; he observes an increased curvature in the meridian parallel to the wound, and in a certain number of instances a flattening in that at right angles to it. During and after cicatrisation the astigmatism diminished considerably, but he believes that by making two “parallel” incisions with a cautery, each involving about two-thirds of the thickness of the cornea and about 2 mm. from the limbus cornea, one at either extremity of a given meridian, he can produce a permanent astigmatism of from 4 to 6 D. In a certain number of cases of conical cornea Reymond has been able, by simple incision, to cause complete disappearance of the central opacity, which owes its origin to edema of the tissue, and at the same time to check the process of ectasia; he has been much pleased, also, with the results in this disease of making, at the base of the central portion of most acute curvature, a puncture and counter-puncture with a Graefe knife, which is then withdrawn without completion of the incision, the process being repeated two or three days later in the opposite direction. This seems to point to the possibility of causing some flattening down, or lengthening of the radius of curvature by incisions near the center; but at the close of his paper Reymond admits that the results of all such interference are so uncertain in the case of ordinary astigmatism, and in order that an operation may be even reasonably effective, one must attack the cornea so near the center, and thus leave an unsightly scar, that he does not see his way to recommend any operative treatment of a merely optical error.

With this conclusion most practical surgeons will be inclined to agree.

CORNEAL HORN.

MR. ARNOLD LAWSON (*Ophthalmic Review*, March, 1900,) read a paper at the meeting of the Ophthalmological Society of the United Kingdom, in January, 1900, founded on a case of corneal horn, which he claimed to be unique as far as the literature of the subject was concerned. The case occurred in a female hydrocephalic idiot, aged eight, the horn being situated on the middle of the cornea and about half an inch long. The eye being unsightly as well as totally blind, he had excised it, and now displayed sections of the growth. He considered that it was a true cicatricial horn, composed of granulation tissue, and he thought the sequence of events was as follows: (1) Atropic changes following pressure on the ophthalmic division of the fifth nerve; (2) ulceration of the cornea, leading to perforation; (3) the formation of granulation tissue, undergoing unhealthy proliferation, similar to that which produced "proud flesh." He maintains that the tumor consisted not of heaped-up corneal epithelium but of granulation tissue, which, in absence of an epithelial covering, went on proliferating without a check.

Mr. Treacher Collins suggested a different explanation—namely, that after sloughing of the cornea, a mass of granulation tissue formed on the surface of the iris, which developed into a pseudo-cornea and became staphylomatous. The unusual thing was the accumulation of epithelium on the surface of this which gave rise to the horn-like appearance.

USE OF ATROPIN SULPHATE AS A MEANS OF DIAGNOSTICATING HEAD-ACHES CAUSED BY EYE-STRAIN.

DR. LANDMAN, of Toledo, (*The Journal of the American Medical Association*, April 14, 1900,) believes that headaches which are most frequently produced by ocular defects are situated, as to their frequency, in the following regions: supraciliary, occipital, occipitofrontal, vertical and temporal.

When there is a general headache, that is, one equal in all parts of the head, it is due to some depraved state of the system. He alludes to one kind of a headache—namely, one situated on the top of the head, the vertex, having an area about the size of a silver dollar, circumscribed, and associated with tenderness of the scalp, which is almost invariably due to eye-strain, and often amenable to treatment by the use of glasses. The *clavus hystericus* belongs to this class.

Dizziness, when caused by eye-strain, will often be relieved by

paralysis of the ciliary muscle with atropin sulphate, and can be permanently abolished by glasses. The conclusion is that when a persistent headache, situated in any of these localities, disappears on atropin being used in the manner directed, the cause is probably due to eye-strain and can be remedied by properly adjusted glasses. To obtain the result, the atropin must be pushed to the complete suspension of accommodation. The directions for its use are simple: A solution of one fourth of a grain of sulphate of atropin to two drachms of water, with directions to drop three drops in each eye, three times a day, until ten instillations have been made. When, on the return of the patient after the use of the atropin, we find that the headaches have disappeared, then a favorable prognosis for the dissipation of the headaches, through correcting lenses, can be given. There is one general caution to be observed, and that is the careful use of atropin in older persons. In increased ocular tension it should never be used.

STREPTOSYPHILIS.

M. BOUCHERON (*Ophthalmic Review*, March, 1900,) read a paper at a meeting of the French Society of Ophthalmology, October, 1899, in which he held that microbic associations in syphilitic lesions are now recognised to exist, and among these streptosyphilis is one of the most interesting. In some instances the streptococcal lesion has existed previously to the syphilitic infection, and one then sees a lesion develop which is the compound result of the double general or local infection. This variety of mixed lesion is of particular moment in regard to affections of the eye, etc., and it is necessary under such circumstances to treat both morbid conditions coincidently. He carried this out in a certain patient, thus: A man had been under his care for dacryocystitis which had resisted other treatment but yielded to injections of antistreptococcic serum. Some little time after this he acquired syphilis, followed early by violent and very painful iritis. This was treated with the utmost success without confinement even to the house, by the addition of antisymphilitic treatment to the antistreptococcic. He related several other cases, similar in regard to the undoubted presence of both types of dyscrasia, in which the mixed treatment effected results which could not, in his opinion, have been otherwise attained. The serum was given in doses of one-fourth or one-half c.cm., daily, injected under the skin of either the abdomen or arm. Redness, swelling, etc., occurred locally, if not immediately, then, after the third or fourth injection; later, the local reaction was less, and larger doses could be tolerated. He was of the opinion that the serum possessed a strong antagonistic power against streptococci and their toxine, but was also of virtue as a tonic and stimulant of the nervous system.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges should be addressed to the editor: 284 FRANKLIN STREET, BUFFALO, N. Y.

VOL. XXXIX.—LV.

MAY, 1900.

No. 10.

UNIVERSITY DAY.

COMMENCEMENT OF MEDICAL AND PHARMACAL DEPARTMENTS.

THE fifty-fourth annual commencement of the Medical Department and the thirteenth of the Department of Pharmacy of the University of Buffalo, were held on Friday, April 27, 1900.

THE MORNING.

During the first part of the day, as usual, examinations were held by the curators. While this important office was being conducted in one part of the building, in another the arriving alumni were greeting and being greeted. Registration and payment of dues were next in order and, these being attended to, came reunions of classes, and informal visiting by the now rapidly arriving alumni. They were taken in charge by the reception committee, Dr. Nelson W. Wilson, chairman of the general committee, and Dr. Margaret S. Halleck, chairman of the women's committee, and escorted to the several rooms set apart for these meetings.

The classes of 1850, 1860, 1870, 1880 and 1890 got together, those of them that are left, and talked over old times and dug up out of the past reminiscences of the good old days when they were students and were passing through the vale of hopes and fears just as the fledglings in medicine were passing then through the same ordeal.

Officers of the class of 1870 were elected as follows: President, Dr. C. D. Kibler, Corry, Pa.; secretary and treasurer, Dr. L. W. Byam, Mumford, N. Y.

Officers of the class of 1880 were elected as follows: President, Dr. Ten Eyck O. Burleson, Bath, N. Y.; secretary, Dr. C. H. Woodard, Buffalo; treasurer, Dr. C. M. Daniels, Buffalo.

Officers of the class of 1890 were elected as follows: President, Dr. D. J. Tillotson, Rochester; vice-president, Dr. J. J. McAdam, Buffalo; secretary and treasurer, Dr. B. C. Johnson, Buffalo.

The classes of 1850 and 1860 elected no officers.

After the reunions luncheon was served at the Iroquois.

After the curators had completed the examinations of the class of 1900, they were entertained at luncheon by the faculty at the Buffalo Club.

THE AFTERNOON.

Alumni Association Meeting.

The twenty-fifth regular session of the Alumni Association was called to order by the President, Dr. William Warren Potter, in Alumni Hall, at 2.30 o'clock.

After the minutes of the previous session had been read and approved the treasurer, Dr. H. U. Williams, presented his annual report. It was in detail and showed :

Receipts during the year from all sources	\$546.52
Expenditures	544.25
Balance on hand, April 27, 1900	\$2.27

On motion the report was accepted and an auditing committee authorised. The president named Drs. Allan A. Jones and E. H. Ballou as such committee. The committee subsequently reported the treasurer's statement correct in every particular.

On motion the president was empowered to appoint a nominating committee. The chair named Drs. F. W. Barrows, Eli H. Long, and H. G. Matzinger as a nominating committee, who reported as follows :

President, Dr. Devillo W. Harrington, Buffalo, class of 1871
 First vice-president, Dr. Frank H. Moyer, Moscow, class of 1872.
 Second vice-president, Dr. A. W. Bayliss, Buffalo, class of 1889.
 Third vice-president, Dr. C. S. Payne, Liberty, class of 1880.
 Fourth vice-president, Dr. Mary J. Slaight, Rochester, class of 1880.

Fifth vice-president, Dr. Clarence King, Machias, class of 1885.
 Secretary, Dr. T. H. McKee, Buffalo, class of 1898.
 Treasurer, Dr. Herbert U. Williams, Buffalo, class of 1889.
 Trustee for five years, Dr. William Warren Potter, Buffalo, class of 1859.

Executive committee, Dr. Albert T. Lytle, Buffalo, class of 1893, chairman; Dr. Grover W. Wende, Buffalo, class of 1889, and Dr. Abram T. Kerr, Buffalo, class of 1897.

On motion, the secretary was instructed to cast the ballot of the association for the group of officers nominated. The secretary complied and the foregoing were declared elected officers for the ensuing year.

The president then delivered his annual address, the subject being Metrorrhagia and the menopause.

It was discussed by Drs. Hayd, Mann and Frederick.

Dr. Maud J. Frye next read a paper on The symptomatology of early ectopic gestation. It was discussed by Drs. Frederick, Mann, Charles A. L. Reed, of Cincinnati, and Hayd.

Dr. Grover W. Wende followed with an interesting talk on certain skin diseases, illustrated by a large number of most excellent stereopticon views.

Dr. L. A. Weigel, of Rochester, closed the proceedings with an informal talk in the Diagnostic value of the x-ray, illustrated by the stereopticon.

The JOURNAL will publish these papers in a subsequent issue.

At 5.30 p.m. the meeting adjourned *sine die*.

THE EVENING.

Commencement Exercises.

Owing to the alterations going on at Music Hall the commencement exercises were held at Central Presbyterian Church. In the absence of the Chancellor, Hon. James O. Putnam, the degrees were conferred by the Vice-Chancellor, George Gorham, Esq.

At precisely 8 o'clock, a large audience having already filled the spacious church, the procession headed by the vice-chancellor, Mr. Gorham, and the dean of the faculty, Dr. M. D. Mann, marched into the auditorium to inspiring music and took their places, the officials on the platform, and the graduates in front of the same.

The following order of exercises were then observed :

After music by the orchestra, Rev. George B. Richards, rector of the Church of the Ascension, offered prayer.

Dr. M. D. Mann, dean of the faculty of the medical department, presented to the vice-chancellor the candidates for the degree of Doctor of Medicine. The Hippocratic oath was administered and degrees were then conferred upon the following :

CLASS IN MEDICINE.

John Howard Acheson,	Hugh Ria Brownlee,
James Philip Barr,	Charles Milton Burdick, A.B.,
Theodore V. Bauer, Ph. G.,	James H. Carr,

Charles Thomas Crance,
 Wellington A. Crofoot,
 Rollin Otis Crosier,
 Edward D. Gibson,
 George Wesley Gorrill,
 Edwin R. Gould,
 George W. Grabenstatter,
 Frank L. Grosvenor,
 Nettie C. Heintz,
 Burt Hibbard,
 Edward W. Heim,
 Leon R. Iutzi,
 William H. Jessup,
 Edward W. Jones,
 Bernard W. Junge,
 David J. King,
 Loretta L. Knappenberg,
 Edgar R. McGuire,
 Charles H. McVean,
 Eva Viola Mead,
 Raymond F. Metcalfe,

Mary E. Newman,
 Luther Conklin Payne,
 Minnette Pratt Petrie,
 Frederick A. Pitkin,
 Augustus G. Pohlman,
 William Fred Powers,
 David Hiram Ransom,
 Frank Howard Ransom, A. B.,
 Charles Lawrence Schang,
 Eli Shriver, Jr.,
 Alton L. Smiley,
 Ellis W. Storms,
 Ora Clay Swift,
 Seth Newland Thomas, A. B.,
 Beatrice A. Todd,
 Alexander M. Troup,
 Anna Warnecke,
 George Erwin Welker,
 Charles Sumner Wilson,
 Ralph H. Willse,
 Jacob B. Young.

Dr. John Parmenter, secretary of the faculty, announced the honors for the graduates in medicine. Augustus G. Pohlman, son of Dr. Julius Pohlman, of Buffalo, stood at the head of his class for the four years of the university course. His average standing for the entire four years was 91.6. Charles Sumner Wilson was second, with a standing of 91.1. Charles Milton Burdick was third, with a standing of 91, and the fourth was Mary F. Newman, whose average was 90.1.

Dr. John R. Gray, secretary of the department of Pharmacy, called the roll of candidates for the degree of graduate in pharmacy. The candidates were presented to the Chancellor by Dr. Willis G. Gregory, dean of the department, and degrees were conferred upon the following:

CLASS IN PHARMACY.

Merritt L. Albright, John Ballagh, Roscoe Henry Bard, Louis A. Bradley, Francis Maxon Brimmer, Marion Frank Brzezicki, Rolland Andrew Chandler, Lee H. Cotton, Edward Marvin Cummings, Allen Corbin Day, Charles Nathan Dean, Harley Edwin Dorman, George Francis Feries, Erwin L. Fish, Fannie L. Fish, Willis Bryan Fitch,

William V. Gale, William J. Gram, Jr., Reynold A. Janke, George Burgess Jenkins, Charles Leo Keenan, Jasper Kobler, Howard E. Lane, Charles Forrest Larzelere, James Hugh McAdam, Charles Lawrence McLouth, Austin Charles Marble, Willis Lee Merkley, Lee William Miller, Jesse Monroe Parker, Clarence Newton Reese, James Clark Spaulding, Jr., Walter Erwin Strong, Arthur Gordon Sortore, Cyrus Eugene Sunderlin, Wells Damon Walrath, Jesse P. Wetmore, Paul Skihner Whedon, Lauren Pettebone Young.

The diplomas of Harley Edwin Dowman, James Hugh McAdam, and Willis Lee Merkley, were withheld until they attain their majority.

Honors and prizes were then announced by Dr. Gregory, as follows: Merritt L. Albright was first, with a standing of 93.9 for the entire course. He was also awarded the William H. Peabody prize of \$50. Harley E. Dowman was second, with a standing of 93.3. Jesse Parker Wetmore was third, with an average of 90.2. Fannie L. Fish was fourth, with a standing of 86.6. Charles McLouth came fifth and last on the list, with a standing of 85.7.

In the junior class, the faculty prize of \$25 was awarded to Ernest Chase Holt, who stands at the head of his class, with a percentage of 95.5. Second is Rudolf C. Miller, with a standing of 94.9. Third is William C. Achilles, whose average is 93.5. Fourth is Harry C. Rider, with an average of 92.72. Fifth and last is George Stoll, with an average of 92.68.

Dr. Charles A. L. Reed, of Cincinnati, O., was then introduced and delivered the address of the evening. Beginning with a graceful exordium, he asked sententiously and pertinently, what would be the condition of the world if there were no medical profession? He then gave a sketch of folk-medicine, putting himself in the imaginary attitude of a professor addressing his class, all being believers in this strange admixture of superstition, ignorance and witchery. The treatment of the sick by the folk-doctor was about as it is now by the charlatan, Eddyist, Indian medicine man and trance medium—all of which the learned speaker applied with force and clearness.

Dr. Reed then gave an interesting chronological résumé of the epochs of medicine and sketches of the masters, beginning with Hippocrates, and including the time of Theophrastus, Galen, Avicenna, Harvey, Jenner, and McDowell, showing the origin, descent, and succession of legitimate medicine which alone has any claim upon an intelligent people.

In an eloquent peroration he addressed a few words to the graduates, which brought to a close one of the most entertaining,

finished and instructive addresses we have listened to in many a day. It abounded in learning, wit, sarcasm, pathos and rhetoric; in metaphor and period; and has rarely been equalled for originality of thought or wholesomeness in its lessons.

THE BANQUET.

At the conclusion of the graduating exercises the faculty, alumni, and invited guests repaired to the Iroquois where the 25th annual dinner was served. Seats were taken at 10.25 o'clock in the spacious dining room at tables tastefully decorated and where covers were laid for 150 persons, every chair being occupied. The menu was well prepared and the service was of that sort which makes the Iroquois famous. Good music helped to enliven the occasion and a goodly number of women lent attractiveness to the scene. After an hour and a half spent in eating the dinner, the intellectual feast began.

Dr. William Warren Potter, president of the association, acted as toastmaster and inaugurated the speech-making with the following remarks:

"He said the executive committee had asked him simply to preside, but he found himself loaded with the responsibility of conducting the ceremonies. Taking for his text the figures on the menu, 1875-1900, he continued:

TWENTY-FIVE YEARS!

What memories such a period of time enkindles! What trials it suggests! What triumphs it records! What disaster it engulphs! What achievements it makes possible!!

And yet 'tis but a breath. With a touch of the INFINITE it vanishes into eternity, fading "like a wreath of mist at eve" as millions of similar periods have done, "to darkle in the trackless void" made and ever making by remorseless time.

Twenty-five years!!

Within that period a child is born, passes through infancy, childhood and youth, goes through college, takes his place in community, and begins his life work. This, in brief, is the history of young individual life. In national life it is much the same. Territories are peopled, states are formed and before we realise it, senators and representatives in congress are debating over systems of education, methods of internal improvement, and other great problems of statehood for the new commonwealth.

Twenty-five years ago, when this association was organised, the University, whose 54th annual commencement we have witnessed

tonight, was located well up-town at Main and Virginia Streets, almost on the border of a city of 100,000 inhabitants. Now on the summit of yonder hill at High Street, stands a magnificent building, located near the center of a prosperous city, the second in importance within the state, with 400,000 people who are busy with manufactures, arts, commerce, science and all the varied and various interests that concern this progressive period; and, are, withal at this very moment preparing to entertain within the next year all the nations of the western hemisphere, who will assemble here at a great exposition.

A quarter of a century ago there were seven professorial chairs embracing the principle departments of medicine, with, perhaps, a few clinical assistants; now, behold a great college, with its 70 professors, teachers and instructors. Then there were no laboratories of biology, bacteriology, pathology, physiology or chemistry, or perhaps only the faintest semblance of the two latter. Now all these are in full swing under the best of teachers.

In those days clinical teaching had not reached its present state of perfection; indeed, the didactic method was paramount, and the dictum of the professor was the pupil's authority. Now, bedside instruction constitutes the larger and better portion of the curriculum. The course then was of two years' duration, with no uniform requirements of preliminaries, and no license by the state was demanded. The course now is of four years and graded, the preliminaries must equal the acquirements of a high school graduate, and there is separate state examinations for license to practise.

Finally, in those days there were no women pupils and no alumnæ, while now there are more than 100 of the latter, who are well represented here this evening, every one a credit to Alma Mater.

It must not be inferred from what I have said that Buffalo University Medical College was not in those days a strong, well-equipped school, for, in reality, it was one of the best and fully abreast of the period in its methods of instruction. It was founded by some of the ablest men in the country, and the founders have been succeeded from time to time as they disappeared from the scene, by men of great learning, skill and profundity. If they did not ask as much of candidates for medical degrees as your present teachers, it was because nowhere was as much required as in this busy bustling age of iconoclasm—this iron age of positivism.

For obvious reasons, I may not speak of the individual members of the present teaching body. Many of them are grouped around these tables and within the sound of my voice. They are well known

to you all; they have your confidence and esteem, as they have that of the citizens of this community. They are distinguished among the profession of this country as teachers and practisers of the various sciences and arts pertaining to medicine and surgery; indeed, their fame is not limited by the borders of American shores, but has gone abroad wherever legitimate medicine is recognised throughout the world.

The class of 1900 is fortunate, most fortunate, in the choice of its environment for entrance into the most humane and ennobling of the learned professions.

If, then, I may not speak individually of your faculty, I trust I may be pardoned for making personal reference to one of the number, one who is loved and respected by you all, as he is also by this entire community, one who has been grievously afflicted during the past few weeks with direful sickness, but who, happily, is now to all appearances on the high road to speedy recovery. I ask you, one and all, to rise in your places and drink his health, sending him words of greeting and best wishes for his early recovery, and for a long and prosperous life. Ladies and gentlemen, I pledge you the health of Professor Roswell Park.

The response was prompt, the audience rose en masse and amidst rousing cheers, flying napkins, and rattling glasses, the health of Dr. Park was eagerly drunk.

The toastmaster, paying little heed to the printed rotation, then announced the sentiments and called upon the speakers in the following order of sequence :

Alma Mater, Dr. Charles G. Stockton.

"He thought as a sage, though he felt as a man."

The Class of '00, Dr. William Fred. Powers.

"Think naught a trifle, though it small appear."

The Physician Idealized, Dr. Cora Billings Lattin.

"It were a journey like the path of heaven,
To help you find them."

Preaching and Practising, Rev. George B. Richards.

The Pan-American, Hon. William I. Buchanan, Director-General.

"Lest men suspect your tale untrue,
Keep probability in view."

The Ohio Idea, Dr. Charles A. L. Reed, Cincinnati, Ohio.

"There is occasions and causes why and wherefore
in all things."

Prof. Stockton, in response to the sentiment, "Alma Mater," pointed out that while the average resources of the medical schools of the country are not great, the University of Buffalo is exceptionally

well equipped in many respects. In spite of that fact, however, the University needs help, and he appealed to the new graduates to help it all they could and urged them all to unite with the Alumni Association and to take an active part in its proceedings. It was a bright speech, eloquent, witty and serious by turns.

Dr. William Fred Powers, responding to the sentiment "The Class of '00" delivered a neat appreciation of the efforts of the faculty which, he said, had had the result that the members of the class just graduated knew more about the practice of medicine than anyone else in the world.

Extremely bright and clever was the response of Dr. Cora Billings Lattin to the toast "The Physician Idealised." She appealed for wider recognition, by the male members of the profession, of the value and need of the woman physician and pointed out that besides filling a real need in the life of suffering womankind, the woman doctor could do much towards teaching medical ethics of many characteristics which are undesirable.

Rev. George B. Richards was asked about ten minutes before he stood up to speak, to respond to the toast "Preaching and Practising." He readily assented and in a clever and witty impromptu speech made an appeal for the admission of the clergy into sick rooms. "If the preacher is a fool," he said, "keep him out, just as you would keep out a fool doctor, but recognise the fact that a wise clergyman can often be of real benefit to your patient."

Director-General Buchanan spoke on "Reciprocity in Medicine." He declared that the South American republics today offer the best field in the world for the American physician who can talk Spanish, and he told of efforts that are being made to effect an interchange of courtesies that will secure the recognition of American diplomas in those countries.

Dr. Charles A. L. Reed, of Cincinnati, chairman of the executive committee of the Pan-American Medical Congress, who followed Mr. Buchanan, confirmed his statement regarding the value of South America as a field for practice, and offered to give all those present such credentials as would insure them a foothold in any of the Latin-American republics. Then, in a witty reply to Mr. Richards, he pointed out that the danger of allowing ministers in the sick room was that they might induce the patient to try some of the patent medicines which the clergy are so fond of endorsing for advertising purposes.

At 2.10 a.m. the toastmaster thanked the speakers and the audience who had so ably responded to the sentiments of the evening

and so patiently listened thereto, thus materially aiding the executive committee in its efforts to make the occasion interesting. He then declared the meeting adjourned.

PEN PICTURES OF THE MEETING.

One of the gayest of the gay throng was Dr. G. R. Hinman who is a sort of a double header. He got out in '70 and he came back and belonged to the class of '98, which has been variously termed "wild Indians" and "holy terrors." They were an irreverant gang and to them Dr. Hinman was "Pop" from the day he joined them. And he was one of the boys in spite of the luxuriant growth of dignity which flourished on his chin. The boys loved him because he was always willing to help them, and told them stories and possessed a never failing wit and humor. It was Dr. Hinman's famous malarial mot which loosened the screws in Dr. Stockton's dignity and started him laughing. Dr. Hinman had been practising in lumber camps and much of his work had been of a luetic character; when Dr. Stockton asked him one day: "How do you treat malaria in Michigan, doctor?" the dear old "Pop" answered mildly, but with conviction: "Iodide of potassium and mercury."

Dr. Hazen of '98, who was president of the Rotten Row Club in the senior year has grown a mustache since he has been at the General Hospital, and he is going to practise in the Adirondacks, too. Dr. Hazen was on the reception committee. He and Dr. J. S. Otto took trolley rides in the afternoon.

Dr. Conrad Diehl took his weather eye off of Fisher long enough to run in and register. Then he flurried out in pursuit of a boom, which looked like the one he has in the incubator.

The register showed up some mighty poor specimens of hand-writing. The race for the prize was a tie between three signers. "Henry Dow, Buffalo," looked like it might have been written with a club-foot. Somebody "Higgins, Sanborn, N. Y.," and a careful examination of the signature has failed to solve the mystery of the initials, wrote like a man with his hands tied behind his back. "Wilson, Buffalo," looked as if it had been written with a cross-cut saw. What his first name is could only be guessed at. There were ink marks on the book, but they had no human semblance. Each of these gentlemen should carry a rubber stamp, or an identification card.

Dr. Henry Lapp, of Clarence, and Dr. S. W. Wetmore got together during the day. That means a great deal, too, for each is a story-teller and full of reminiscences.

Dr. D. W. Harrington who was elected persident was nervous about it, it seemed. Anyway Dr. Diehl cast longing eyes at the tall man from out Main Street way, and mentally wished things might come to him as easily.

Dr. D. A. Currie, of Englewood, N. J., was there too. But the only thing which will make Dr. Currie miss a meeting will be his inability to be present. That's a sort of foolish remark but its true.

Dr. Frederick and Dr. Reed of Cincinnati, looked one another over like a couple of big chiefs about to engage in a tribal warfare. Instead, they got together in a tubal argument and cited so many cases of ectopic pregnancy, that a less prosaic outfit than a lot of doctors might have very naturally wondered if the majority of babies were born the old-fashioned way or through a tube.

Dr. Hayd when he discussed Dr. Maud J. Frye's paper on ectopic pregnancy made a few remarks which were eagerly listened to by the students present. There is much fascination about the subject which is so closely crowding cocaine for first place in popular favor.

Some day some one is going to print a story about Dr. C. A. L. Reed, of Cincinnati, and he will have no one to blame but himself, for he told it to a handful of doctors. Far be it from me to violate confidence, but if you happen to run across Dr. Reed, ask him to tell you about the time he went up in the mountains of Kentucky, to help out a poor and struggling country practitioner who had written him for operative help. He will tell you that he went up there and did half a dozen operations, was gone a week, got held up by a flood, and all for \$300. Then ask him how he found out that that poor, innocent country doctor had collected about a \$1,000 for the work and kept the balance. But ask him. He might not like to have the story made public. This can be told, however, for it only shows Dr. Reed's natural interest in the profession. A year later he met a native of the region on whose abdomen he had made his mark, and asked how the doctor was getting along: "Fine, fine," was the answer, "he's built him a new house."

The surviving members of the D. E. Society held a session in the college building to make preliminary arrangements for the semi-centennial meeting next April and to choose a member from the class of '00 for election next year. Only one member is admitted each year.

Dr. Cora Billings Lattin's speech at the dinner was one of the most graceful, most self-contained speeches ever delivered in Buffalo by a woman. And what is more she said something of importance and she said it all neatly.

The man who is running the Pan-American prelude and who will direct the whole affair, Hon. W. I. Buchanan, sat beside the toast-master at the banquet. The other side of him was snuggled up to Dr. Reed. Mr. Buchanan told some Spanish and South American stories between courses which were mighty interesting. He has traveled all over South America and knows the native like a book. Some day a wise and discriminating administration will be looking for the proper man to represent the United States at an important European court and it need not surprise anyone to see that administration strike Buchanan's trail and follow it up. He's a big man, mentally, physically and diplomatically. *En passant*, he is going to announce the appointment of his medical director for the Exposition pretty soon, so you want to keep your weather eye on the lightning rods which have been hoisted by the profession.

Dr. Stockton made a mighty bright speech at the dinner and why should he not? Did he not sit between Dr. Mann and Dr. Harvey R. Gaylord?

When you want spiritual help hoist your danger signal and steer for Rev. G. B. Richards, rector of Ascension Church. There's a minister who is a man with a heart, and not a square-cut coat full of prayers. Mr. Richards spoke at the dinner. He did not make a speech at all; he just spoke and he told the doctors some truths about preaching which they will remember. He also remarked a few things about medicine which were correct. The nice thing about this minister is that he has none of that offensively protuberant religion against which one so often bumps, at dinners which are unfortunate enough to have secured the services of a fool minister as a speechist. He strikes one as a man whose religion is of the broad-gauge character; a man who would go into a sick room and carrying with him cheer, comfort, rest and smiles, rather than a hell-and-damnation face and a God-have-mercy-on-your-poor-wicked-soul prayer. Can you imagine a man who publicly says that there are "fool ministers as well as fool doctors," being anything but a help and a comfort in a sick room. Mr. Richards tells stories, too, and he tells them well. He is a publicist and a preacher; that much he admits. He is likewise a peach.

The most eloquent event at the dinner was the standing toast drunk to the speedy restoration to perfect health of Dr. Roswell Park. And at the conclusion of the toast a dozen glasses were shattered. Count up on the fingers of one hand the men in this city who command such affectionate respect.

The newspaper men gave thanks to the executive committee with good cause. They had a table to themselves where they could do their writing, where they could see and hear. And this was their first experience of the kind at a medical dinner—and for that matter at most of the other public dinners in this city. The space which the newspapers gave the event showed that they appreciated the little attention which did not put any one out and made the newspaper men feel as if they were welcome as they surely were.

HONORS FOR DR. JACOBI.

DR. ABRAHAM JACOBI, of New York will attain the 70th year of his age May 6, 1900. It is proposed by a number of his friends and professional associates to tender him a subscription dinner in commemoration of the event.

It is a remarkable coincidence that Dr. Jacobi should reach almost simultaneously the 30th year of his teaching as clinical professor of diseases of children at the College of Physicians and Surgeons. The class of 1900 at the college appropriately celebrated these events April 25, 1900, when Dr. Jacobi delivered the last lecture for the year in his course. The students gathered in the big theatre of Vanderbilt Clinic to give their professor a loving cup filled with flowers tied with the college colors, blue and white, and framed resolutions signed by the members of the class, telling of their esteem and of their hope for his prolonged activity in medicine.

R. T. Frank, '00, presided, and E. L. Trudeau, of the same class, made the presentation. Dr. Jacobi thanked them, and said that the secret of his appearance before them was that he always worked with younger men. This he was sure, constituted a preventive to old age.

The dinner above referred to will be given at Delmonico's, 44th Street and 5th Avenue, New York, Saturday evening, May 5th. The subscription price of the dinner will be \$10.00, including wine, and those desiring to attend should notify Dr. A. G. Gerster, chairman of committee, P. O. Box 3032, New York.

It is announced that Dr. Joseph D. Bryant will preside and that Carl Schurz, Seth Low, William Dean Howells, Professor William H. Thomson and William Osler, of Baltimore, will speak.

The principal event of the evening, according to further announcement, will be the presentation to Dr. Jacobi of a "festschrift," a way of honoring a prominent man up to this time never used in this country. Famous Americans, Germans, Englishmen, Frenchmen, Spaniards and Austrians, most of them specialists, have written for the book. Dr. Bryant will make the presentation speech. Many associations will be represented, and the German Medical Society has arranged to give Professor Jacobi a set of resolutions and an engrossed album containing the members names.

Dr. Jacobi was born in Hartum, Westphalia, on May 6, 1830. He studied in the universities of Greifswald, Göttingen and Bonn. At the last place he received the doctorate degree. When the revolution broke out, although only a boy of eighteen, he joined the Young German party and enlisted in the army.

At Berlin in 1849 he was arrested, together with Marx, Freiligrath and Becker. He was tried for treason, and taken to Cologne and thrown into prison, where he remained for eighteen months. When, after much cruel treatment, he was released he was tried and acquitted, but immediately after was rearrested and sentenced to six months in Bielfeld Castle for an alleged insult to the Crown.

In 1853 Dr. Jacobi came to New York, and became lecturer in infantile pathology in the College of Physicians and Surgeons, and in 1860 he took the first chair of children's diseases established in America, that in the New York Medical College. In 1870 he became clinical professor of diseases of children in the College of Physicians and Surgeons. In 1898 the University of Michigan bestowed on him the degree of LL.D. He has served in many New York Hospitals, has been an officer in the prominent medical societies, written several well known works, and has been made honorary president of the International Medical Congress of 1900 in Paris, where he will read a paper on Infant Feeding.

THE tenement-house commission recently appointed by Governor Roosevelt, is constituted as follows: Messrs. Raymond T. Almirall, of Brooklyn; Hugh Bonner, Paul D. Cravath, Robert W. DeForest, of Manhattan; William A. Douglas, of Buffalo; Otto M. Eidlitz, of Manhattan; F. Norton Goddard, of Manhattan; William Lansing, of Buffalo; William J. O'Brien, of Manhattan; James B. Reynolds,

of Manhattan; I. N. Phelps Stokes, of Manhattan; Myles Tierney, of Manhattan; Alfred T. White of Brooklyn and Dr. George B. Fowler, of Manhattan. The duty of the commission is to make careful examination into the tenement houses in New York and Buffalo, their condition as to the construction, healthfulness, safety, rentals, and the effect of tenement-house life on the health, education, savings, and morals of those who live in tenement houses, and all other phases of the so-called tenement-house question in these cities that can affect the public welfare. An appropriation of \$10,000 is made for the expenses of the commission, which may subpoena and compel the attendance of witnesses, employ counsel, assistants, and experts, and make such recommendations to the next legislature as it deems wise, to enable the best and highest possible condition for tenement-house life in New York and Buffalo to be attained.—*Med. Record.*

As indicating whether antitoxin for diphtheria has done anything for Buffalo or not the following table which is a record of all cases of the disease reported and the number of deaths from the disease during the years mentioned, will show :

DEATH-RATE FROM DIPHTHERIA.

YEAR.	CASES REPORTED.	DEATHS.	PERCENTAGE OF DEATHS.
1893 ¹	455	149	33
1894	534	214	40
1895 ²	851	242	28.5
1896	1,071	249	23
1897	1,168	198	17
1898	622	85	13
1899	609	83	13

THE Secretary of the Treasury has submitted to the House a request for \$200,000 additional to the fund to prevent the introduction and spread of epidemic diseases. He says the Surgeon-General of the Marine Hospital Service reports that, on account of the continued and increasing danger from plague, medical officers have been stationed at United States consulates in Europe from which emigrants depart. Medical officers have also been stationed at the fruit ports

1. Inauguration of bureau of bacteriology.

2. The beginning of bacteriological diagnosis *almost universally* by physicians. The increases during the following years of reported cases due to the fact that many illnesses formerly called "tonsillitis" were found to be diphtheritic in origin.

of Central and South America to guard against yellow fever. The consulates at Yokohama, Kobe and Hong Kong also have medical officers. He continues as follows:

The Surgeon-General further states that plague has recently been reported at San Francisco, and that the early recrudescence of yellow fever in Florida and other southern states is seriously apprehended.

To meet this state of affairs the Secretary asks for \$200,000 in addition to the \$300,000 heretofore given, and he requests that it be made immediately available, "since the appropriation is almost exhausted, and should yellow fever appear during the month of June a deficit would be unavoidable."

This is a timely and wise suggestion on the part of Secretary Gage, and congress should make speedy response to the request. There should be neither delay nor parsimony in guarding against epidemic disease.

TRAINED nurses are wanted in Cuba, according to Assistant Adjutant-General St. J. Greble, Superintendent of hospitals and charities at Havana, who has written to the Bellevue Hospital authorities at New York, that he desires to place a trained nurse in each hospital and orphan asylum in Cuba that has more than 100 inmates, "to straighten out the present deplorable condition of most of these institutions." He asks the authorities to recommend men and women who would be willing to undertake the work.

Two acts have been passed by the state legislature providing hospitals for New York City. One establishes a hospital for the treatment of contagious eye diseases, food, medicine and supplies to be furnished by the health department; the other provides for an appropriation of \$350,000 for site and erection of a hospital for pulmonary tuberculosis, the New York City Board of Health to have jurisdiction. and prescribe rules and regulations for its government.

MAJOR TAYLOR, the United States Army Surgeon, in charge of the military hospital at Honolulu reports to the Surgeon-General that the ravages of the plague are at an end. The medical officers have been hard pressed and overworked in their battle with the plague at Honolulu, but they have kept conscientiously at it and have won a brilliant victory.

PERSONAL.

DR. FRANCIS E. FRONCZAK, of 508 Fillmore Avenue, Buffalo, was married, April 25, 1900, to Miss Lucy Rosalie Tucholka, likewise of Buffalo. After a reception Dr. and Mrs. Fronczak left for New York and on April 28th, sailed for Gibraltar and a short tour through the Mediterranean, expecting to visit several African ports. They will also visit Italy, Switzerland, the Oberammergau Passion Play, and on June 5-7th will take part in the jubilee of the 500th anniversary of the foundation of the Jagellenian University at Cracow, Austria, to which Dr. Fronczak will serve as a delegate from the University of Buffalo. He will study at the clinics of the universities of Cracow and Warsaw, will take part in the ninth congress of Polish Physicians and Scientists, which will be held from July 21-25, at Cracow, where he will represent the American Medical Association, and deliver one of the four public addresses. The other three speakers, one each day, will be Professor Neucki, of the University of St. Petersburg; Prof. Mikulicz, a third some Polish celebrity from Switzerland. Dr. Fronczak's subject will be The Progress and Present Status of Medicine in America.

From Cracow Dr. Fronczak will leave with the Polish contingent for Paris, where they will take part in the thirteenth International Medical Congress. Dr. Fronczak is registered in the medical jurisprudence section of the congress. Dr. Fronczak and wife, and Mr. Speyszynski, a Polish druggist from East Buffalo, who will accompany them, will return to Buffalo about August 25th.

DR. CHARLES F. HOWARD, of Buffalo, has been appointed by Governor Roosevelt to be a member of the board of managers of the Elmira Reformatory. This came somewhat in the nature of a surprise, for it was not generally known or even suspected that a Buffalonian would be chosen.

Dr. Howard will go into the board thoroughly equipped to remedy evils that are believed to exist and assist in instituting reforms in internal management, which for years have been needed, according to the newspapers.

It will be remembered that the first public attack on so-called Brockwayism was made in Buffalo by the *Evening News*, which was the prelude to the general newspaper fight against the methods employed at the reformatory by newspapers in this state.

Dr. Howard's sympathies, it appears, were aroused by the reports of abuse and ill-treatment which came to Buffalo at that time; and ever since then he has taken an active interest in the affairs of what should be a model institution. He has studied the questions involved in the management of the institution and by his appointment it appears to the JOURNAL that a man is chosen as manager who is peculiarly well fitted to fill with judgment and intelligence, a place which has been made vacant by resignation of one of the supporters of the existing régime.

Dr. Howard is a graduate of the University of Buffalo, class of '78, and has been practising in this city for more than twenty years.

DR. EDWARD CHAPIN, of Brooklyn, has been appointed by the regents of the University of the State of New York, a member of the Homeopathic Board of State Medical Examiners, to fill the vacancy caused by the death of Dr. A. R. Wright, of Buffalo.

DR. EUGENE WASDIN, Surgeon U. S. Marine Hospital Service, lately ordered to Buffalo to relieve Passed Assistant Surgeon J. B. Stoner, has arrived at his post and assumed command of the service at this station. Dr. Stoner has been ordered to St. John, N.B.

OBITUARY.

DR. EDWARD MULHERON, of Binghamton, N.Y., died at his residence in that city April 6, 1900, aged 53 years. He graduated at the Medical Department of the University of Buffalo in 1872.

DR. GEORGE LATTIN, of Cattaraugus, N. Y., died at his home on Wednesday, April 11, 1900. His funeral was largely attended the following Friday at 1.00 p.m. by his friends, neighbors and professional colleagues.

DR. GEORGE S. PALMER, of Buffalo, U. of B. '86, died at his home, 325 Franklin Street, in this city, April 14, 1900, aged 38 years. Dr. Palmer had been in poor health for some months, the immediate cause thereof being a fall he sustained last autumn. He had been engaged in the practice of medicine in Buffalo since his graduation. He was unmarried and is survived by his mother, his only near kin.

SIR WILLIAM OVEREND PRIESTLY, the distinguished obstetrician, member of the House of Commons for Edinburgh and St. Andrew's Universities, died in London on April 11th. He was born in 1829, and was a grand nephew of Joseph Priestly, the celebrated chemist. He was M. R. C. S. in 1852, M. D. Edin. in 1853, and F.R.C.P. Edin. in 1858.

SOCIETY MEETINGS.

THE Buffalo Academy of Medicine held meetings during the month of April, 1900, as follows:

Section on Surgery.—Friday evening, April 6th. Program: Notes on Prostatectomy, Paul¹ Thorndike, of Boston.

Section on Medicine.—Tuesday evening, April 10th. Program: Post chicken-pox nephritis, Dewitt H. Sherman; The treatment of scarlet fever, Henry R. Hopkins; Normal saline solution in gastro-enteric diseases of children, Irving M. Snow.

Section on Ophthalmology, Otology, Rhinology and Laryngology.—Monday, April 16th. Program: Some notes on absorption of cataract, Benjamin H. Grove. A. A. Hubbell and Benjamin F. Rogers led in the discussion which followed.

Section on Pathology.—Tuesday evening, April 17th. Program: Mistakes in gynecology and their pathological importance, Herman E. Hayd; discussed by M. A. Crockett and M. D. Mann.

Section on Obstetrics.—Tuesday evening, April 24th. Program: Limitations of gynecology, Prof. John B. Deaver, Philadelphia, Pa.

THE next annual meeting of the fourth district branch of the New York State Medical Association, comprising fourteen counties of the western part of the state, will be held at the Buffalo Club, Delaware Avenue, this city, on Tuesday, May 8th, beginning at 10 o'clock a.m. Luncheon will be served at the Club by the Buffalo members. The meeting will be held under the presidency of Dr. Wm. H. Thornton, and an exceptionally large and interesting meeting is anticipated. Dr. E. D. Ferguson, of Troy, president of the State Medical Associa-

tion; Dr. F. H. Wiggin, of New York, and other out-of-town guests are expected to be present and to take part in the proceedings.

At this writing the following papers have been promised: Hepatic sclerosis in nonalcoholics, A. L. Benedict; Title to be announced, Charles G. Stockton; Cases of injuries of the eye, Alvin A. Hubbell; Dislocation of tendons, and treatment, Wm. M. Bemus, Jamestown; Report of an epidemic of variola and varicella at Mount Morris during 1898, J. M. Hagey, Mount Morris; Treatment of typhoid fever, John H. Sackrider, East Randolph; Title to be announced, Elmer Starr; Hemorrhage after confinement and its treatment, Herman E. Hayd; A case of perforating gastric ulcer, Allen A. Jones; Goiter, E. J. Meyer; Intestinal adhesions, with report of cases, C. E. Congdon; Rupture of symphysis pubis during parturition, with report of a case, George A. Himmelsbach; Review of the present status of the operation of Jonnesco, Dr. M. Hartwig.

All physicians are invited to attend the meeting.

THE National Confederation of State Medical Examining and Licensing Boards will hold its ninth annual meeting at Atlantic City, June 4, 1900. The Bulletin of the American Academy of Medicine, in its last issue speaks of this organization as follows:

"The meetings at Atlantic City are promising well; at least those which are the more closely associated with the *Bulletin*, for, of these only can we speak officially. Dr. Suiter, the Secretary of the National Confederation of State Medical Examining and Licensing Boards writes that preparations are making for their meeting, but it is too soon to make any definite announcement. The meeting will be held on Monday, June 4th, at a place to be determined upon later. This organisation has in it the potentiality for the good of the profession to a greater degree than almost any other combination of medical men. Hence there is a peculiar propriety in the imitation printed on the letter head: "Every state or territorial board whose duty is to examine or license physicians intending to practise in the jurisdiction of the board, by whatsoever name it may be called, is urged to affiliate with the National Confederation if it has not already done so."

The present officers are: Dr. J. N. McCormick, Bowling Green, Ky., president; Drs. N. R. Coleman, Columbus, O., and B. F. Crummer, Omaha, Neb., vice-presidents; Dr. A. Walter Suiter, Herkimer, N.Y., secretary and treasurer; Drs. W. S. Foster, Pittsburgh, Pa., J. M. Mathews, Louisville Ky., T. J. Happel, Trenton,

Tenn., William Warren Potter, Buffalo, N. Y., and Augustus Korndoerfer, Philadelphia, the executive council.

THE Niagara Falls Academy of Medicine will hold its annual meeting at the office of Dr. J. H. Miller, Monday, May 7, 1900, at 8.45 p.m.

The nominations for officers are as follows: President, Drs. Miller, Leo-Wolf, Scott, Guillemont; vice-president, Drs. Guillemont and McBrien; secretary and treasurer, Drs. Leo-Wolf, Miller, Potter; trustee vice Dr. Campbell, Drs. Scott and Campbell; council, Drs. Miller, McBrien and Potter.

Dr. Scott will deliver the presidential address. A full attendance is requested.

COLLEGE AND HOSPITAL NOTES.

THE Jefferson College Hospital, at Philadelphia, together with the handful of dilapidated buildings that complete the rectangular lot of ground upon which the hospital now stands will be torn down soon. On that site in the heart of the city, will be erected a spacious modern hospital building, constructed after the best features of the leading hospitals of the world. In connection with it will be established a maternity hospital, larger than anything of its kind in Philadelphia; also a training school for women nurses and a training school for men nurses.

The committee which has had the new hospital in hand is composed of six gentlemen, and Mr. Edward H. Weil, president of the Board of Trustees, is chairman. Last February they issued a circular to all the departments of both the college and hospital, asking information that would assist in the preparation of plans. A visiting committee has gone over all the hospitals in this part of the country to investigate the latest improvements and report.

It will be gratifying to the many alumni and friends of Jefferson throughout the world to learn of the prospects for a new structure of imposing proportions, that is on the eve of materialisation.

THE Margaret Fahnestock Training School for Nurses, No. 304 East Twentieth Street, New York was opened with impressive ceremonies, April 19, 1900.

The building was erected by Harris C. Fahnestock as a memorial to his wife who died in 1898. In her long illness she was attended by nurses from the Post-Graduate Hospital, whose devotion, with that of the physicians, was the cause of Mr. Fahnestock's resolve to put his memorial to his wife in a form that should be a helpful agency to all nurses.

He accordingly bought a large property in East Twentieth Street, opposite the hospital, and on May 1, 1899, the building was begun. It is a large six-story building, in the old Dutch Colonial style of architecture, and is designed to serve as a home for the nurses in the training school connected with the hospital.

All the appointments of the building are artistic as well as scientific. The entrance floor contains a large reception hall finished in white, with Pompeian red walls. Over the fireplace is a large bronze tablet bearing this memorial inscription:

IN MEMORY OF
MARGARET A. FAHNESTOCK,
September 3, 1835.
December 2, 1898.

Two large reception rooms in sage green and mahogany and a lecture room that seats 175 persons occupy the remainder of the floor. Above this are the apartments for the nurses, every one having a separate room. Provision is made for between sixty and seventy, and in addition are the "invalid rooms," with their separate bath-rooms and cooking room. These can be completely isolated from the rest of the house by the arrangement of doors and corridors.

Every floor of sleeping rooms has four bathrooms, and the finish throughout is in accord with the latest sanitary methods. The rooms are all prettily furnished with white enamel in colonial style, and handsome rugs cover the floors. An important feature is the roof garden, with its well-stocked wall boxes of thriving plants. Here are many rocking chairs and hammocks, and couches will be added as the weather makes it the evening resort.

The exercises at the opening were simple and brief. Addresses were made by the Rev. Dr. William B. Bodine, of Philadelphia, and Warner Van Norden, after which Mr. Fahnestock made the presentation of the necessary legal deeds. Dr. D. B. St. John Roosa accepting them as president of the hospital corporation. The many guests then inspected the house.

THE New York State Hospital for the treatment of incipient tuberculosis is soon to be established in the Adirondacks. A bill appropriating \$50,000 with which to begin the work passed the last legislature and Governor Roosevelt recently appointed five trustees, who under the act, will locate the hospital and perform such other duties as will put the plan in operation. The names of the trustees are as follows: To serve five years Howard Townsend, of New York; four years, Dr. John H. Pryor, of Buffalo; three years, Dr. Willis G. Macdonald, of Albany; two years, Walter Jennings, of New York; one year, Frank E. Kendall, of Saranac Lake. The trustees are to purchase 1,000 acres of land for the site and the state forest and preserve board is to set apart a like amount of state land—the location to be approved jointly by the state board of health and the state forest and preserve board. It is expected that the board will meet at Albany early in May for organisation and conference.

Book Reviews.

THE INTERNATIONAL TEXT-BOOK OF SURGERY. By American and British Authors. Edited by J. COLLINS WARREN, M. D., LL. D., Professor of Surgery in Harvard Medical School; Surgeon to the Massachusetts General Hospital; and A. PEARCE GOULD, M. S., F. R. C. S., Surgeon to Middlesex Hospital, and Teacher of Operative Surgery at Middlesex Hospital Medical School; Member of the Court of Examiners of the Royal College of Surgeons, England. Volume II. Regional Surgery. With 471 illustrations in the text and eight full-page plates in colors. [Price, \$5.00.] Philadelphia: W. B. Saunders. 1900.

The first volume of this work was reviewed in the March edition of this magazine. The first chapter in the second volume deals with surgery of the mouth and tongue, and is written by N. P. Dandridge, of Cincinnati. It begins with congenital deformities, and takes up almost every known injury or traumatism that has affected this region of the body. It is copiously illustrated with drawings and half-tone plates. The second chapter supplements the first, considering diseases of the jaws, gums, pharynx and tonsils, and is prepared by J. Ewing Mears. Surgery of the nose forms the subject-matter of the third chapter and is supplied by H. Holbrook Curtis. Up to the present time the surgery of the face has never been so fully presented in a text-book as in this work. We think, however, that it would have added very much to its interest if the third chapter had been prepared by John O. Roe, of Rochester, N. Y., whose great experience in correcting deformities of the face and nose by ingenious and original surgical methods have made him famous all over the world.

We now come to surgery of the neck, dealt with in the fourth chapter, by A. Pearce Gould, the junior editor. It is excellent in

every detail and is especially to be commended in its exposition of the surgery of the larynx and trachea, of the parotid and thyroid glands, and of tumors of the neck. The fifth chapter takes up the surgery of the esophagus, is written by John B. Deaver, and has never been equalled in a text-book for precision and completeness. The next subject is surgery of the thorax and is considered in the sixth chapter by John Murray. This is among the newer regional surgery, since it is but recently that the viscera of the thorax have been subjected to radical surgical procedures. This author carries the literature of his subject forward to the present period. In this chapter he also considers artificial respiration in its application to asphyxia during anesthesia.

One of the most important questions in surgery is dealt with in the seventh chapter, which is written by the senior editor, J. Collins Warren. It is difficult to imagine how it could have been done better. Especially to be commended is the author's presentation of malignant disease of the breast, and the border-line state between benignity and malignancy. The illustrations of this chapter in tone and color are splendid. The technic of abdominal surgery, also by Dr. Warren, is a detailed account in chapter eight of the usual methods pursued from the standpoint of the general surgeon. It seems a little odd that it should be inserted here, for its appropriate place would naturally bring it after the diagnosis of such diseases as abdominal section would be employed to cure. However, the ninth chapter is allotted to the consideration of the diagnosis of abdominal diseases, so it brings the two topics into juxtaposition. This latter is written by A. W. Mayo Robinson, and is characterised throughout by patient, studious attention to the subject.

Peritonitis furnishes the material for a short chapter by Robert W. Abbe, and the next three—11, 12 and 13—are devoted to the consideration of intestinal surgery. They are by J. Collins Warren, who writes of acute intestinal obstruction; Andrew J. McCosh, who writes on the surgery of the stomach and intestines; and by Charles McBurney, who deals with the surgery of the vermiform appendix. All the various phases of intestinal disease and the surgery appropriate to cure it, are set forth in these chapters with a scientific completeness rarely found in a text-book, and the illustrations are for the most part useful in amplifying the text.

The surgery of the liver, gall-bladder, biliary passages and pancreas is presented in the fourteenth chapter, by John W. Elliot. This department of surgery has been very much extended of late, and is still undergoing investigation by competent observers, notable among whom are the Davis Brothers, of Birmingham, Ala. It is probable that in future editions of this work this topic will be considerably extended in its scope and method. Hernia, which is always of absorbing interest to every practitioner liable to meet with a case, is considered in the fifteenth chapter, in a monograph well-written and copiously illustrated. Every phase is set forth from trusses to the radical operation, all with a conciseness that challenges admiration.

Diseases of the rectum and anus are next presented in an excellent chapter, by George A. Peters. The surgery of the penis, urethra, prostate and bladder constitute the topics of the seventeenth chapter, written by William Bruce Clarke; surgery of the ureters is described by Weller Van Hook; surgery of the kidney is dealt with by Christian Fenger; and surgery of the scrotum and testicle, form the subject of a chapter of which H. Tuholske is the author.

The subject of gynecology is considered in chapters twenty-one and twenty-two, by F. Henrotin. Of course in this work only surgical gynecology is expected to be considered. The illustrations relating to shortening the round ligament, lacerations of the cervix, and repair of the perineum are excellent. The subject allotted to the twenty-third chapter is the surgery of the uterus and it is written by Lewis S. McMurtry. Fibroid tumors are first treated of and their pathology is clearly and intelligently set forth; then follow sections on etiology, symptoms, diagnosis, prognosis and treatment. Dr. McMurtry thinks since the improvement in surgical technic, and a better knowledge of the history of these neoplasms, that surgery offers the best avenue of relief to patients carrying these tumors. He would not operate, of course, unless the symptoms justified it, but he thinks the vast majority of cases demand immediate operation, because of special conditions pertaining to individual cases. He describes the technic of the operation of hysterectomy with great precision and clearness, presenting a succinct account of the best methods. Under the heading carcinoma of the uterus, he also describes removal of the organ by the vaginal route. As might be anticipated by all who know this distinguished author his monograph is a well-digested, scholarly contribution to the literature of the surgery of the uterus. The next chapter, the twenty-fourth, is devoted to the consideration of the influence of age and race in surgical affections and is prepared by W. L. Rodman.

The senior editor contributes a chapter on gonorrhea, and Robert W. Parker one on syphilis. These two subjects are ably presented by most competent observers. Surgery of the eye forms the topic of the twenty-seventh chapter and surgery of the ear that of the twenty-eighth, contributed respectively by E. Treacher Collins and J. J. Orne Green. The surgery of the skin is next considered in a well-written chapter by Rudolph Matas. Skin-grafting forms an interesting part of this topic and the various methods are described. Military surgery is presented in the thirtieth chapter, by William H. Forwood and naval surgery in the thirty-first, by Charles A. Siegfried, since deceased. Traumatic neuroses are dealt with by James J. Putnam in the next chapter, and the thirty-third and final chapter is allotted to the consideration of tropical surgery, which is written by James A. Cantlie. An illustration is given in this section of a case of elephantiasis of the scrotum, weighing 110 pounds, that was successfully removed.

From even the foregoing cursory presentation of the treatise, it will be inferred that it is one of the best of the later surgical text-

books. Its editors are men of experience as teachers, hence they know the needs of students and practitioners. To say that they have issued a work that meets the requirements of both, is only according scant praise to one of the completest and best surgical text-books yet printed.

A MANUAL OF THE DIAGNOSIS AND TREATMENT OF THE DISEASES OF THE EYE. BY EDWARD JACKSON, A. M., M. D., Emeritus Professor of Diseases of the Eye in the Philadelphia Polyclinic; formerly Chairman of Section on Ophthalmology of the American Medical Association; Member of the American Ophthalmological Society; Fellow and Ex-President of the American Academy of Medicine. Duodecimo, with 178 illustrations and two colored plates. Pages 604. Philadelphia: W. B. Saunders, 925 Walnut Street. 1900.

With such excellent hand-books on the eye at hand as the treatise of Dr. Noyes, the text-book of Dr. de Schweinitz, the American text-book, which is distinctively American, and the American issues of Fuchs, Swanzy, Nettleship, Jessop and others so acceptably received in this country, there is, perhaps, a question as to the real need of another of the same kind. And yet who can object when one is offered by an author so well known and so well qualified as is Dr. Jackson? For many years he has contributed quite liberally to the literature of ophthalmology and his writings have taken high rank. Those on refraction are regarded as authoritative. In view of his attainments and experience and the conscientiousness with which he uses his pen, nothing but a careful and complete survey of ophthalmology would be expected in this work. And such it proves to be on examination. It is a compact duodecimo volume of 604 pages, including the index, and aims "to meet the needs of the general practitioner of medicine and the beginner in ophthalmology." First, importance is given to the recognition and management of the conditions likely to be presented early in practice, and less stress is laid upon rarer diseases and difficult operations. The subjects are arranged in order similar to that of other hand-books, and at the end of each chapter is added a selected bibliography that serves to direct the reader to more extended studies, should he desire to pursue them. To many this will be a great help. Another feature of the work, oftentimes of great convenience, is the placing of the title of the subject-matter of each page at its top.

The work is divided into twenty chapters, the last of which is very useful to the general practitioner as well as the ophthalmologist, and reviews the ocular symptoms and lesions connected with general disease. Ophthalmic operations are described in a separate chapter, and include those which one is most commonly called upon to perform. Perhaps the most complete part of the work and that in which the personality of the author is most apparent is that which deals with refraction and the diagnosis and treatment of refractive errors. The reviewer endorses, fully, the author's methods and conclusions. In emphasizing, however, the value of this part of the

"manual," there is no intention of detracting from the merit of the other chapters. The latter are well-proportioned and the subjects contained in them are considered clearly, concisely, and as fully as limited space allows. If there be any short-coming, whatever, in the work, it is in the too brief consideration of injuries to the eye; but this brevity is no less conspicuous in this than in other works of its kind. The fact is, injuries of the eyes are of prime importance to every practitioner, and our text-books should be full and explicit in dealing with their diagnosis, prognosis and treatment. If space must be curtailed, let it be in the chapters on diseases of the retina, choroid or optic nerve and not in those on injuries.

We congratulate Dr. Jackson on the production of a manual of such pronounced excellence, and we commend it to the student and the profession as a book whose statements can be trusted and whose directions can be relied upon. It is a guide of unusual value.

A. A. H.

CROCKETT'S GYNECOLOGY. A Pocket Text-Book on Diseases of Women. By MONTGOMERY A. CROCKETT, A. B., M. D., Adjunct Professor of Obstetrics and Clinical Gynecology, Medical Department of the University of Buffalo, N. Y. In one handsome 12mo volume of 368 pages, with 107 illustrations. Philadelphia and New York: Lea Brothers & Co. 1900. [Price, Cloth, \$1.50, net; flexible red leather, \$2.00, net.]

The reviewer set about a task which sometimes is irksome with the feeling that a Buffalo author must be given more than the usual attention bestowed on a book for review. So well written is this volume, however, that the task soon became a pleasure.

There are many points especially worthy of mention. Chapter two on local treatment describes but three methods of procedure, the prolonged hot vaginal douche, the tampon, and intrauterine applications, and of the last the author very justly remarks: "There are a few cases of uncomplicated metritis which may be benefited by local applications to the endometrium; but they are so few that womankind as a whole would be the gainer were topical applications within the uterus utterly abolished, except in connection with the operation of dilating and curetting."

The third chapter deals with gynecologic operations in general. The author has this to say apropos of suture material: "It is hard to understand why surgeons persist in using buried nonabsorbable ligatures and sutures when the formaldehyde gut is so easily prepared and possesses the ideal features of sterility, strength and absorbability." Again, "there is no excuse for the intraabdominal use of any other material than formaldehyde catgut, and the surgeon who exposes his patients to the dangers which follow the use of silk sutures and ligatures, should be held responsible for untoward results." Many surgeons will say "amen" to this, and not a few patients might. It is interesting to note that the editor of the series takes exception to Dr. Crockett's strong statement. And so do a good many others with far more experience than Dr. Crockett; nevertheless there is much in his statement that may prove worthy of consideration.

Some operators may consider that Dr. Crockett uses saline solution in intraabdominal operations in a somewhat homeopathic manner, when he recommends that it be poured into the pelvis in small quantities, swabbed about and removed; and further, that it is a good plan to leave in the abdomen a pint or two of the solution.

Concerning hand disinfection, the disinfection of the vagina, drainage, in short all matters relating to preparation of patient and operator, the author sets forth the latest and most generally accepted methods.

The greater part of the book deals naturally with the various pathologic conditions to which the female genital organs are prone. Great originality in writing on such subjects is not possible nor, where one is addressing students, desirable. The author has aimed rather to make the work representative, and in this he has succeeded so well, and has presented his facts with such lucidity, that one would need to go far to find a more readable and altogether valuable minor volume on gynecology. If Dr. Crockett has a fault it is that of being too positive, a failing not uncommon with teachers, and not at all serious. Indeed, it is probably the author's ability as a teacher of medicine, an ability of more than local note, which enables him to present a text-book so admirably adapted to the minds of the student and young practitioner.

The preface makes acknowledgement of the writer's indebtedness to Dr. M. D. Mann for many valuable criticisms and suggestions.

This volume is printed and bound in uniformity with Leas' pocket text-book series.

M. J. F.

A PRACTICAL TREATISE ON DISEASES OF THE SKIN. For the Use of Students and Practitioners. By JAMES NEVINS HYDE, A. M., M. D., Professor of Dermatology and Venereal Diseases in Rush Medical College, Chicago. New (fifth) edition. In one 8vo volume of 866 pages, with 111 engravings and twenty-four full-page plates, eight of which are colored. [Price, cloth, \$4.50 net; leather, \$5.50 net.] Philadelphia and New York: Lea Brothers & Co. 1900.

Any text-book that is able to exhaust an edition in two years is virtually above criticism. This work will need no introduction as it occupies a unique position and has long been a standard. This fact renders a specific and elaborate review of the present edition superfluous. No more could be said of it than has already been said of its predecessors. Notices heretofore made have left none of its peculiar merits to be discussed at this time.

In the preface the author very properly calls attention to the fact that new chapters have been added. Without seeming to be invidious, we may say that the article on Blastomycetic dermatitis is worthy of special attention. Too little space has been allotted to porokeratosis, but after all this fault may be a good one, the author evidently meaning to give each disease space according to its relative frequency and clinical importance. Where recent investigations have thrown light upon etiology and therapeutics necessary changes

are made throughout the book. We have therefore a volume whose style is not only delightfully easy, but in which is combined a vast array of important information.

The appearance of the book is equal to the contents; the illustrations, taken from photographs are truly admirable—superior to anything of the kind that has ever appeared. Better than all, they are the work of nation artists, which have very properly displaced the effete wood-cuts of Kaposi which have for so long a time made our text-books hideous. The new lithographs do not reach the same high standard, but are quite acceptable. This text-book masters the essential facts relating to diseases of the skin, giving each author, irrespective of nationality, due credit, not showing any favoritism whatever, but clearly bringing out individual views and experiences.

It is not an exaggeration to say that this is one of the best works of the class in the English language. By its means, a thorough knowledge of skin diseases may be acquired without the necessity of consulting many books which is of great importance to students of medicine.

G. W. W.

CHILDREN, ACID AND ALKALINE. "Health, the Golden Mean." The Law of Diet Selection, Contraria. The Therapeutic Law, Semilia. By THOMAS C. DUNCAN, M. D., Ph.D., LL.D., Professor of Medicine and Diseases of the Chest, Dunham Medical College; Consulting Physician to Chicago Foundling's Home, St. Anthony's Hospital, Cook County Hospital, etc., etc. Philadelphia: Boericke & Tafel. 1900.

This book, bearing the singular title, Children, Acid and Alkaline, contains its germ of truth—not a new truth, however, and so obscured by fantastic theory that one is amused rather than instructed in perusing it. Permit the reviewer to call the attention of Buffalo's zealous health commissioner to this quotation from page 41, on the feeding of alkaline children: "The long tube with a hard nipple should be selected." Have the children of Buffalo been properly classified? Possibly the prohibition of the sale of the long tube nursing-bottle is so drastic a measure, and there may be infants in this city whose physical welfare is threatened by such a sweeping interdiction. Might not the ordinance be so modified, that if a woman could prove that she had an alkaline child, a long tube nursing-bottle would be permitted?

M. J. F.

A MANUAL OF MODERN GASTRIC METHODS, CHEMICAL, PHYSICAL AND THERAPEUTICAL. By A. LOCKHART GILLESPIE, M. D., F. R. C. P. E., F. R. S., E., Lecturer on Materia Medica and Therapeutics in the School of Medicine of the Royal College, Edinburgh; Post-Graduate Lecturer on Modern Gastric Methods, Edinburgh, etc., etc. With a chapter upon the mechanical methods used in young children, by JOHN THOMSON, M. D., F. R. C. P. Ed., Assistant Physician, Royal Hospital for Sick Children, Edinburgh. New York: William Wood & Co. 1899.

Every physician in active general practice will be glad to obtain practical information relating to disorders of the stomach that will enable him to apply his therapeutics with greater advantage. This

monograph attempts to supply this want. It discusses in a concise and clear fashion every phase of the subject from the ingestion of food to its final distribution as nutrient; from digestive juices to chyle; and from health to disease.

The various methods of employing lavage are described, and its application at the bedside delineated. The significance of hyperacidity is set forth and the way to correct it is amplified. The various instruments needed for modern gastric investigations are described and illustrated, and the most useful chemical aids to cure are given. It is a practical manual, prepared by a clinician and brings the details of the subject forward to the present period. Taken, all in all, it is the most satisfactory condensation of the subject we have yet seen, and is surely destined to win favor with every student of gastric disorders and method.

A MANUAL OF THE PRACTICE OF MEDICINE. Prepared Especially for Students. By A. A. STEVENS, A. M., M. D., Professor of Pathology in the Woman's Medical College of Pennsylvania; Lecturer on Terminology and Instructor in Physical Diagnosis in the University of Pennsylvania; Physician to St. Agnes's Hospital and Out-patient Department of the Episcopal Hospital, etc. Fifth edition, revised and enlarged. Illustrated. Philadelphia: W. B. Saunders. 1900.

This excellent manual of the practice of medicine is designed especially for the use of students. This edition has been thoroughly revised. The chapters on diseases of the pancreas and on diseases of the blood and of the ductless glands, as well as the articles on appendicitis, angina pectoris, aphasia, myxedema, and syringomyelia, have been entirely rewritten. Other quite new articles have been added. The fact that this is the fifth edition is of itself sufficient comment on the value of the work. The book is a handsome one, with red edges and soft leather covers.

M. J. F.

ESSENTIALS OF DISEASES OF THE SKIN, INCLUDING THE SYPHILODERMATA. Arranged in the Form of Questions and Answers, for Students of Medicine. By HENRY W. STELWAGON, M. D., Ph.D., Clinical Professor of Dermatology in the Jefferson Medical College; Physician to the Department of Skin Diseases in Howard Hospital, etc. Fourth edition, revised and illustrated. Saunders's Question Compend No. 11. Philadelphia: W. B. Saunders. 1899. [Price, \$1.00.]

ESSENTIALS OF MEDICAL CHEMISTRY, ORGANIC AND INORGANIC. Containing Questions of Medical Physics, Chemical Philosophy, Analytical Processes, Toxicology, etc. Arranged for Students of Medicine. By LAWRENCE WOLFF, M. D., Demonstrator of Chemistry, Jefferson Medical College; Physician to the German Hospital, etc., etc. Fifth edition, revised by SMITH ELY JELLIFFE, M. D., Ph.D., Professor of Pharmacognosy, College of Pharmacy, New York, etc. Saunders's Question Compend No. 4. Philadelphia: W. B. Saunders. 1899. [Price, \$1.00.]

The first of these compends above noted, dealing with the diseases of the skin, has, in the fourth edition, been entirely revised with careful scrutiny, with a view to advancing its precepts to the present needs of students. Several of the rarer affections have been

described, and it is now as nearly complete as it is possible for a compend to be made.

The second title given above, relating to a compend on chemistry that has passed to its fifth edition, is of a subject that always perplexes students of the freshmen year. This compend will be of great assistance to such, but should in no way supplement the more substantial works that lay a deeper foundation of knowledge. This principle ought to be too well understood at this time to need repetition. Compend is commended for what they really are, simply aids to memory in early student life—nothing more, nothing less.

OPERATIVE SURGERY. By JOSEPH D. BRYANT, M. D., Professor of the Principles and Practice of Surgery, Operative and Clinical Surgery, University and Bellevue Hospital Medical College; Visiting Surgeon to Bellevue and St. Vincent's Hospitals; Consulting Surgeon to the Hospital for Ruptured and Crippled, Woman's Hospital and Manhattan State Hospital, etc. Volume I. General Principles, Anesthetics, Antiseptics, Control of Hemorrhage, Treatment of Operation-Wounds, Ligature of Arteries, Operations on Veins, Capillaries, Nervous System, Tendons, Ligaments, Fasciæ, Muscles, Bursæ and Bones, Amputations, Deformities, Plastic Surgery. This volume contains 749 illustrations, forty-nine of which are colored. New York: D. Appleton & Co. 1899.

This work has been so long out of print that a new edition means practically a new treatise. It has been rearranged, rewritten in large part, and largely supplied with new illustrations, thus bringing it forward to meet the demands of the present day.

The synopsis of subjects in this volume, given above in the title, indicates its scope. It is stated in the preface that special effort is made to eliminate from the faces of the illustrations all evidence of commercial thrift. We do not fully understand the meaning intended to be conveyed by this statement, but presume the object is to make the treatise hyperethical in character.

Bryant is a forceful writer and makes himself clear on all operative technic—a matter of supreme importance in these days of voluminous detail. He tells how to control hemorrhage in a way that even the novitiate cannot fail to acquire accurate knowledge on this important part, if he will carefully study this section. The treatise, when completed with the second volume, will be a distinct addition to the literature, already rich in quantity and excellent in quality. The author is to be congratulated upon his revision of a treatise that will always be welcome in the library of the practical surgeon.

RECOLLECTIONS OF A REBEL SURGEON AND OTHER SKETCHES, OR IN THE DOCTOR'S SAPPY DAYS. By F. E. DANIEL, M. D. Illustrated. Austin, Texas: Von Boeckmann, Schultze & Co. 1899.

To paraphrase Pope, "A little humor is a dangerous thing." The printed page is a cruel test for many spoken words. To nothing is it more fatal than to humor, unless the wit that it preserves be of that high order that marks the work of genius. The accent, attitude, and gesture of the *raconteur*, on which so much of the force of the story depends, are all lost in type. And the pathetic suffers no less than the humorous.

M. J. F.

TRANSACTIONS OF THE AMERICAN SURGICAL ASSOCIATION. Volume XVII. Edited by DEFOREST WILLARD, A. M., M. D., PH. D., Recorder. Printed for the Association and for sale by William J. Dornan, Philadelphia. 1899.

The proceedings which this volume records were had at Chicago in June, 1899, under the presidency of Dr. W. W. Keen, of Philadelphia. The subject of his address is the Technique of Total Laryngectomy, which is the first scientific paper in the book. The president details the method he adopted in a recent case which rendered the operation simpler, caused but little loss of blood and little shock, and avoided the danger of aspiration pneumonia. The patient was out of bed on the fourth day and was practically well on the tenth, all of which demonstrated that Dr. Keen had converted a very severe and dangerous operation into one of comparative safety.

The next most interesting paper was by Maurice H. Richardson, of Boston, on Appendicitis. The discussion on this paper was interesting, oftentimes spirited, and only served to indicate that there are still many questions relating to the subject that are *sub judice*. Dr. A. Vander Veer, of Albany, presented some very interesting cases of appendicitis with complications, which served to accentuate Dr. Richardson's paper and the discussion thereon.

Bradford and Vose, of Boston, discussed forcible correction in spinal caries in a short but interesting paper. Many other papers of value were read, and altogether the volume is one of the best of the very many excellent ones published by this sterling association.

REFRACTION AND HOW TO REFRACT, Including Sections on Optics, Retinoscopy. The Fitting of Spectacles and Eye-glasses, Etc. By JAMES THORINGTON, A. M., M. D., Adjunct Professor of Ophthalmology in the Philadelphia Polyclinic and College for Graduates in Medicine; Assistant Surgeon at Wills' Eye Hospital; Associate Member of the American Ophthalmological Society; Fellow of the College of Physicians of Philadelphia; Member of the American Medical Association; Ophthalmologist to the Elwyn and the Vineland Training Schools for Feeble-minded Children; Resident Physician and Surgeon Panama Railroad Company at Colon (Aspinwall), Isthmus of Panama, 1882-1889, etc. Two hundred illustrations, thirteen of which are colored. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1900.

"Refraction and how to refract" is essentially a book for beginners in ophthalmology. Much of the subject-matter may be found in the text-books on diseases of the eye, but there are also many definitions and explanations, many suggestions as to the methods of examination, many hints as to correction of refractive errors that are not found there. The subjects are concisely handled, and the author succeeds in making himself clearly understood, both in the didactic part of the work, and in the illustrative cases which he has incorporated. He very properly advises the use of cycloplegics in testing for refractive errors, except in presbyopes and in cases where it is impracticable or improper to use them. He emphasizes retinoscopy, and justly so, as the most reliable objective method of determining the refraction of the eye, and gives full directions as to how to use it.

Besides treating of refraction and accommodation of the eye and the methods and instruments applicable to their determination, he also

gives a brief chapter on the ocular muscles and one on the adjustment of eye-glasses and spectacles. The book, in short, is what it claims to be, an elementary work on refraction and the optical correction of refractive errors. It is a good book for a beginner, and will serve as a helpful introduction to that deeper study of the subject which is so necessary to good ophthalmological work. A. A. H.

BOOKS RECEIVED.

Progressive Medicine—Volume I, 1900. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in Jefferson Medical College of Philadelphia. Octavo, handsomely bound in cloth, 404 pages, 36 engravings and a colored plate. Philadelphia and New York: Lea Brothers & Co. Issued quarterly. Price, \$10.00 per year.

Twentieth Century Practice. An International Encyclopedia of Modern Medical Science. By Leading Authorities of Europe and America. Edited by Thomas L. Stedman, M. D., New York City. In twenty volumes. Volume xix. "Malaria and Microorganisms." New York: William Wood & Co. 1900.

Hartridge, Refraction. The Refraction of the Eye. A manual for students. By Gustavus Hartridge, F.R.C.S., Senior Surgeon to the Royal Westminster Ophthalmic Hospital. Tenth edition. 1900. Illustrated, 12mo. P. Blakiston's Son & Co, 1012 Walnut St., Philadelphia, Pa. 1900. Price, \$1.50 net.

The Anatomy of the Brain. A text-book for medical students. By Richard H. Whitehead, M.D. Professor of Anatomy in the University of North Carolina. Illustrated with forty-one engravings. 6¼ x 9¼ inches. Pages, v—96. Extra vellum cloth, \$1.00, net. Philadelphia. The F. A. Davis Co., Publishers, 1914-16 Cherry St. 1900.

Injuries to the Eye in their Medico-legal Aspect. By S. Baudry, M. D. Professor in the Faculty of Medicine, University of Lille, France, etc. Translated from the original by Alfred James Ostheimer, Jr., M.D., of Philadelphia. Pa. Revised and edited by Charles A. Oliver, A. M., M. D., Attending Surgeon to the Wills Eye Hospital; Ophthalmic Surgeon to the Philadelphia Hospital; Member of the American and French Ophthalmological Societies, etc. With an adaptation of the Medico-legal Chapter to the Courts of the United States of America. By Charles Sinkler, Esq., Member of the Philadelphia Bar. 5¾ x 7¾ inches. Pages, x—161. Extra cloth, \$1.00, net. Philadelphia. The F. A. Davis Co., Publishers, 1914-16 Cherry St. 1900.

Elements of Clinical Bacteriology for Physicians and Students. By Dr. Ernst Levy, Professor in the University of Strasburg, i. E., and Dr. Felix Klemperer, Privat docent in the University of Strasburg, i. E., second enlarged and revised edition. Authorised translation by Augustus A. Eshner, M. D., Professor of Clinical Medicine in the Philadelphia Polyclinic, etc. Philadelphia: W. B. Saunders. 1900. [Price, \$2.50.]

A Hand-book for Nurses, By J. K. Watson, M.D., Edin. Late House-Surgeon Essex and Colchester Hospital; Assistant-House Surgeon Sheffield Royal Infirmary and Sheffield Royal Hospital. American edition, under supervision of A. A. Stevens, A. M., M. D., Professor of Pathology in the Women's College of Pennsylvania, etc. Philadelphia: W. B. Saunders. 1900. [Price, \$1.50.]

A Cyclopaedia of Practical Medicine and Surgery. A Concise Reference Book, alphabetically arranged, of Medicine, Surgery, Obstetrics, Materia Medica, Therapeutics and the various specialties, with particular reference to diagnosis and treatment. Compiled under the editorial supervision of George M. Gould, M.D., and Walter L. Pyle, M.D. Philadelphia: P. Blakiston Son & Co. 1900.

ITEMS.

PARIS AND THE MIDNIGHT SUN.—A trip to the thirteenth International Medical Congress and some scenery is planning under the auspices of a committee of prominent medical men representing all sections of our country.

An itinerary has been prepared after careful consultation with members proposing to be of the party who are old travelers and have been over the ground. The particular advantages of route chosen are the trip across the Atlantic on the high class, twin-screw, vessel "Campania" of the express service, the view of Scotland at the best season of the year, the sight of the Norwegian fjords, and the interesting carriage rides between Christiania and Bergen on the return from the North Cape. At that spot, the most northern extremity of Europe, the marvelous spectacle is to be seen at that season of the year of the sun shining brightly at the dead of night and making a complete circuit of the visible heavens in the twenty-four hours. Returning from the North Cape the trip is pursued to Bergen, thence to Hull, London, The Hague, Rotterdam, Brussels and Paris in time for the opening of the session of the International Medical Congress, August 2d to 9th; thence to Antwerp, and return to the United States in steamers sailing in the second week of August. The committee has entrusted all the final details to Henry Gaze & Sons, at 113 Broadway, N. Y., who have been in the tourist business since 1844, and can warrant complete satisfaction. All deposits should be made payable to this firm and they may be written to for further information and literature.

DELEGATES TO THE INTERNATIONAL CONGRESS OF THE MEDICAL PRESS IN PARIS.—There have been some changes in the delegation to the Medical Press Congress to be held at Paris, July 26, 27, 28, 29, 1900, since the first announcement. The following is a revised list:

From the Association of American Medical Editors: Dr. J. M. Mathews, Dr. H. Horace Grant, Louisville, Ky.; Dr. George F. Butler, Dr. George H. Simmons, Chicago; Dr. C. F. Taylor, Dr. H. A. Hare, Philadelphia; Dr. Dillon Brown, Dr. Daniel Lewis, New York; Dr. Thos. H. Hawkins, Denver, Colo.; Dr. Henry W. Coe, Portland, Ore.

The American Medical Publishers' Association: Dr. J. C. Culbertson, Cincinnati, Ohio; Mr. J. MacDonald, New York City; Dr. Ferdinand King, New York City; Mr. Charles Wood Fassett, St. Joseph, Mo.; Dr. Landon B. Edwards, Richmond, Va.

The Medical Press Club of the Mississippi Valley: Dr. I. N. Love, St. Louis, Mo.; Dr. Frank P. Norbury, Jacksonville, Ill.; Dr. Alexander J. Stone, St. Paul, Minn.; Dr. John Punton, Kansas City, Mo.; Dr. Hanau W. Loeb, Dr. C. G. Chaddock, Dr. O. F. Ball, St. Louis.

Titles of papers for the Congress should be sent to Dr. R. Blondel, 8 Rue de Castellane, Paris.

BUFFALO MEDICAL JOURNAL.

VOL. XXXIX.—LV.

JUNE, 1900.

No. 11.

Original Communications.

THE TREATMENT OF EPILEPSY IN ITS INCIPIENCY.

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Medical Superintendent of Craig Colony for Epileptics, Sonyea, N. Y.

INSTEAD of The Treatment of Epilepsy in Its Incipency, the title of this paper might have been, The Treatment of Epilepsy in Early Life, epilepsy being essentially a disease of early life.

I think it was Dean Swift who said, "If you want to make much of a Scotchman, you must catch him while he is young." The same principle largely applies in the treatment of epilepsy. Sir William B. Gowers makes the statement that 75 per cent. of all cases of epilepsy begin under the age of twenty years. Personally, I believe that more cases occur before that age. In three years and a half 505 epileptics were admitted to the Craig Colony. In 427, or 83 per cent. of these, the disease began before the twentieth year.

Both epilepsy and insanity are largely diseases that tend to appear at one or other of the epochal periods. In the child, epilepsy is especially liable to develop: (1) during early infancy and dentition; (2) during the period covered by the seventh and eighth years; (3) during the marked transitional period of puberty. In either case, the epileptic basis may be present as a heritage, requiring only the physiological disturbances incident upon such periods to develop the attacks.

Epilepsy, then, or epileptic phenomenon, may occur in early life from the following causes: (1) direct transmission of the epileptic foci from the parent to the child; (2) accidents at birth, including birth palsies, cerebral hemorrhages, and accidents due to instrumental delivery; (3) to the results of intense pathological processes that should be physiological, such as difficult dentition, accompanied by

very high temperature, and occurring in a rachitic, tuberculous, or scrofulous child; (4) to the results of indigestion and malassimilation, due to improper feeding; (5) to the accidents of early life common to that period; (6) to the grave physiological disturbances that come at puberty, and that are more apt to be followed by evil consequences in persons who suffered in infancy or early child life from convulsions, or who inherited a neurotic taint.

Before we approach the subject of this paper, I would attempt some differentiation of the forms of epilepsy; and while we have as yet no satisfactory nomenclature of the disease, I would first divide it into true and false, and exclude in the beginning those cases of so-called epilepsy due to some distinguishable physical infirmity or defect, such as strained eye muscle, a stricture of the urethra, a poisonous gas within the intestinal canal, an immediate injury to the brain, these and the like. We know that all of these, and kindred disorders, light up what is best to term in the beginning, epileptiform convulsions; but which are not, in the manner in which we understand genuine epilepsy, the true disease. That later in life they may lead to genuine epilepsy there is no doubt.

On the same principle, a single animal walking through the forest along a well-defined course, will not, at first, make much of an impression on the surface of the earth. If this animal follows the same course several times each day for many days in succession, the result eventually will be a well-beaten and defined path. There has been made on the land an impression, a mark that it is difficult to eradicate without leaving some trace. The same principle applies to so-called epileptiform convulsions; an irritant applied in the first place may necessarily require to be very severe in order to produce convulsive phenomena; but that irritant, each time in the future it is applied, needs to be less and less in intensity in order to produce the same epileptic phenomena. Habit epilepsy is as well defined and understood as is habit chorea, habit spasm, or any pathological or physiological habit; and, sifted to its last analysis, it simply means that the necessary stimulation or irritation was properly applied in the first place to produce convulsive phenomena, and that each succeeding stimulation applied to that part required to be less and less in order to produce the same, or worse results. Moreover there is an inverse ratio about this matter, for, as the irritant becomes less in degree, the result grows greater, while the opposite is equally true.

We will therefore eliminate, at the beginning of our study, these so-called epileptiform seizures, bearing in mind, at the same time,

that they are destined to be destructive unless relieved; but we cannot, at first, conscientiously consider them as true epilepsy. The very fact that so large a per cent. of all cases of epilepsy show origin before the age of twenty years is ample evidence that the disease is largely transmitted by heredity or through hereditary influences. This proposition pre-supposes that the individual is defective in some respect in the beginning, or it pre-supposes that the essential soil in which the seed of epilepsy is to be planted is capable of doing the work required. Personally, I have come to believe that the disease is largely one of the degenerative type, that the general tendencies of its effects—true epilepsy, I mean—are toward degeneration and retrogression always.

Another thing is important in the treatment of epilepsy, or epileptic phenomena, and the sooner we can begin it, the better it will be for the individual. Let us revert for a moment to the simile of the animal that tracks the forest. If he passes once over a given course, the surface of the earth is but little changed, or not at all; if he passes over it many times, it will be correspondingly difficult to eradicate the marks made. Therefore the sooner we ascertain and attempt to remove the cause that creates the epileptic channel, or the epileptic focus in the individual, the greater will be the chances of a cure. This principle applies to cases of genuine epilepsy as well as to others, and goes so far as to include even those who have inherited the disease itself, or a tendency to the disease; for we must consider that the fetus in utero cannot readily have impressions made upon it that will bring about convulsions of any kind; at least, there is no evidence on file to show that such has ever been the case; it is only after the irritations that come from the external world are applied to the pre-sensitive nervous system, or the well-prepared soil of the child, that epilepsy is developed.

My first plea, therefore, would be for an early recognition and differentiation of the disease; and let me, if you please, lay special stress upon the word differentiation. Let us first decide whether it be true epilepsy, or whether it be pseudo-epilepsy, or what may be better described as reflex convulsive phenomena. If it proves to be the latter, we can deal with it far more easily and with hopes of far better results, than if the former is found to be true. If it be true epilepsy, we must apply ourselves to the treatment with the expectation of spending more time and more energy and in the hope of accomplishing in the end far less good, because I do not believe, after an experience of fifteen years spent in the immediate study and

treatment of this disease, that it can be demonstrated by any one that more than 6 or 8 per cent. of cases of genuine epilepsy recover; whereas with reflex epilepsy, or cases manifesting reflex epileptic phenomena, the ratio of recovery would go very much higher.

As to form, I would divide the treatment of genuine epilepsy grossly in two ways. First, its institutional treatment; second, its home treatment. And I will dwell here especially on its home treatment, for the reason that my readers probably have a greater interest in that part of the subject. Any one familiar with the facts in the case must realise that it is far more difficult to handle the subject of any disease in the patient's own home than it is in an institution especially constructed and maintained for that especial object, and I do not know of any disease where this fact is so applicable as in epilepsy. I do not know of any class of defectives who are so apt to fly from the lines of normal action as the average epileptic; I do not know of any people, as a class, who cannot be judged in the light of their action of today as to what they will probably do tomorrow, as the epileptic; I do not know of any people whose line of continuity of action is so frequently and violently broken, by virtue of the very nature of their malady, and whose mental vagaries are so uncertain as the epileptic.

The difficulties of home treatment are great, and the first one that we encounter is that of parental sympathy. I am firmly convinced that this well-meant, but illy used influence, has stood stoutly in the way of the recovery of many cases, and I do not see how it can be removed, for we must accept human nature as it is. Parental sympathy in the home nearly always steps in and defeats the objects we are trying to obtain when we prescribe the hour at which the epileptic child should retire, the hour at which it should have its meals, what it should eat, and what the lines of its life in every respect should be. It is a kind and well-meant sympathy, but it is destructive to the child. It has been estimated that not more than from 1 to 2 per cent. of persons suffering from genuine epilepsy recover under home treatment, and one of the chief causes is that the physician's best efforts are defeated by parental sympathy. This element, therefore, should be completely eliminated, if possible; if not, then as far as possible. If the family is able, place a nurse—some one kind, tactful, strong-minded and intelligent—in charge of the child. If this plan does not work, send the child away into the country, where everything for its comfort, education and treatment can be had, remembering always, if you please, that the brain of the

young epileptic is especially apt to deteriorate unless remedial measures are actively put into practice.

Another thing that often tends to defeat home treatment is the free use of medicines, too often, I am sorry to say, of the patent kind given the pampered child by the parents. The credulity of human nature is very great and it is unfortunate that so much faith is put in simple statements, printed to the effect that certain drugs are guaranteed to cure certain diseases. It has been our experience that epileptics, above all other individuals, are prone to believe these statements and to make use of the nostrums prescribed. It has also been our experience that such drugs readily do more harm than they do good, and I will explain the reason. A noted physician, whose acquaintance I have the honor to enjoy, made an intimate study of the so-called "Keeley Cure" for alcoholism a few years ago, and I believe he arrived very nearly at the truth of the composition of the injections given to destroy the taste for alcohol. His conclusion was that the injection contained apomorphia, which, of course, made the patient ill each time he received it, and it was so arranged that he should receive it immediately before each drink he was given, which was carefully cut down each day. The patient, of course, associated the sickness and the taking of the alcohol together and ascribed the sickness to the effects of the alcohol, whereas it was the apomorphia that made him feel badly.

In most of the patent nostrums that I have examined, the so-called sure cures for epilepsy, I have found that they contain some powerful sedative, which, if given according to directions, do often suspend all epileptic manifestations; but it is suspension only. On the other hand, no regard is paid to the patient's physical condition; I have seen cases take these patent nostrums for two weeks and be at the end of that time in a condition of acute delirious mania. The trick, therefore, is to suppress the fits at the expense of the patient's general health; but, remember, it is a suppression only, and not a cure. I believe, therefore, we should strictly guard against the patient in his own home using any of the advertised nostrums for the relief or cure of his epilepsy.

As a third precaution, certain foods only should be used. At the Bethel Colony for epileptics, at Bielefeld, in Germany, where I lived for some weeks in the Spring of 1892, in order that I might study the methods in vogue in the treatment of patients in that institution, I found that more stress was laid upon the preparation and administering of proper foods, in proper quantities, and at proper

times, than in the simple giving of drugs. Dr. Huckzemeir, the chief physician of the colony, who had been there for fifteen years, frequently told me that he believed proper foods were more valuable than drugs in the majority of epileptics. We are not prepared to say that foods are more valuable than medicines, but we are prepared to firmly state that good foods have a firmly fixed place in the proper treatment of epilepsy.

At the Craig Colony for Epileptics we have been accustomed to divide the treatment of patients under three broad heads: first, the medicinal; second, the dietetic; third, the moral. I feel that the food treatment of the young epileptic is so important, that I cannot pass the subject here without laying down what I believe to be certain broad principles connected with the same.

First, we should be extremely careful to administer no food that cannot be readily absorbed and assimilated, for we overlook the fact that the functions of the digestive organs are gravely impaired during epileptic convulsions—usually as the result of anti-epileptic drugs taken in large quantities—and if, in consequence, we give food that the patient is unable to assimilate, this undigested food will decompose in the stomach and intestinal canal and cause irritation of the gastrointestinal membrane, and will be sure to augment the epileptic phenomena.

Second, we should endeavor first to utilise foods to the greatest extent that is safe and possible, for the purpose of checking the waste of tissue, which is associated with every epileptic seizure. The greater the number of seizures and the more intense they are, the greater the waste of tissue to be checked.

We have come to believe at the Colony that our dietary should be made to contain a principle, and we endeavor to recognise this principle instead of laying down hard and fast lines as to the exact articles that should be prescribed or proscribed. I will go a step further and state that the principle of our dietary is that patients shall have meat but once a day, and that at the noon hour, and only a small quantity; they shall have nothing fried in grease, and nothing in the way of pies, cakes or pastry. They must eat largely of cereals, breadstuffs, milk, fruit, eggs and butter; but I would like to reiterate that there are no hard and fast lines, yet there is a fixed principle that it will be well for us to observe in all cases.

Another point of comparison between home treatment and the institution treatment, is the matter of discipline. We have spoken of the epileptic as an individual liable to suffer a break in his con-

tinuity of action. The very nature of his disease makes this possible; the basis of all epileptic phenomena is in the brain; the brain is the organ of the mind and anything that destroys the integrity of the brain will affect the integrity of the mind. His line of continuity of action, therefore, is broken, because his power of inhibition is destroyed. It is here that parental sympathy comes in again, to permit the patient in his own home to do as he pleases. In the institution he is made to feel certain ever present and active forces that tend to keep him along the line of proper conduct. These, in time, will have their effect and, of course, are for his good.

It is hardly essential that I should attempt to cover the drug treatment of epilepsy in this paper; our aim is not so much to treat the disease *per se* as it is the individual; but, at the same time, there are certain drugs, when properly given and their effects carefully watched, which do, undoubtedly, have a direct effect on the seizures themselves. Of the newer of these I might mention the fluid extract of horse-nettle berries, a preparation of Parke, Davis & Co., that we have tried quite satisfactorily during the past summer and with uniformly good results. It appears to have advantages that none of the sedatives of the bromide group possess, for the reason that it does not destroy or impair the functions of the digestive system as the members of the bromide groups do; on the contrary, it appears to possess distinctly tonic properties. Simulo is also another drug that has been used with very excellent results in the treatment of epilepsy. Fleishiz's treatment, that was so popular a few years ago, I believe has had its day. It was the opium and bromide treatment combined, and I have yet failed to see a case in which it produced any permanent benefit.

There is no use in enumerating the drug treatment further, for the list is too long. For obvious reasons it may sometimes be advisable to check or abort an expected seizure, when such seizures are preceded by an aura of sufficient length. This we can do by giving the following mixture: Bromide of potassium, 30 grs.; chloral hydrate, 20 grs.; morphia sulphate, $\frac{1}{4}$ gr. This, of course, being the dose for an adult; the dose for a child to be in proper proportion. This combination, however, acts as a repressant only, and it cannot be said to have any curative properties; but I have known it in certain cases to hold the seizures in abeyance for months at a time.

We have learned from experience to lay great stress on the physical treatment of epilepsy, and by this I mean chiefly the systematic exercise of all the muscles of the patient's body. We make it a

practice to give each patient a thorough physical examination on his entrance to the colony and to prescribe for him such work as he can best do and such work as will probably meet the requirements of the case; for instance, if the right arm or the left leg shows an abnormal weakness, due to a partial destruction of the cells in the brain that govern the right arm or the right leg, we try to give that patient some form of exercise or systematic labor, that will tend to build up the center in the brain that feeds, governs and controls that arm or that leg. We have great faith in the maxim that "The working hand makes strong the working brain," and we have at this Colony today more than fifty young epileptics suffering from paralysis, more or less marked—some of them could more properly be termed exhaustion—as the result of a prolonged number of epileptic seizures, the discharge occurring in a certain area.

The treatment of this particular class of young epileptics has never been properly dwelt upon. They have been classed, unfortunately, oftentimes with the orthopedic cases, and surgical measures have been instituted for the relief of the deformity, whereas, the trouble was central and should be so treated; and I wish right here to lay especial emphasis on the fact that no class of young epileptics deserve more careful and skilful treatment than those who suffer from such deformities. Moreover, it has been our experience that no class of young epileptics can be more greatly benefited than this class; but it requires time, patience, the expenditure of money and a high degree of skill to accomplish it. For some of them we must prescribe work in the gymnasium; for others, work with a hoe, a pick or an axe in the open air; for others the sewing machine; for others a turning lathe, for others other forms of labor that will bring directly into use and build up those parts that are essentially the weakest, always remembering, if you please, that "the working hand makes strong the working brain."

We have had young boys at the Colony for whom we could not find suitable employment just at the time, and who suffered from paralytic deformities due to epilepsy, carry stones from one place to another, merely for the purpose of developing the weakened hand, and his apparently purposeless occupation has resulted in great good to the boy. And just in this connection let me mention the fact that epilepsy is a disease that does not possess a single symptom for which a strictly physiological prototype cannot be found. All epileptic movements and phenomena might be physiological if performed under the conscious action of the individual. This being true, I believe that it

behooves us to treat the cases in a way that will bring into physiological play the muscles of the body that would otherwise be involved in pathological action during seizure.

In so brief a paper as this it is impossible to go into this extremely important subject in detail, and I will therefore try to lay down certain broad principles, only, which I will summarise as follows :

First—Make an early differentiation of the type of epilepsy from which the patient is suffering;

Second—If it be reflex epilepsy, or if the child be suffering from epileptic phenomena, the chances of cure are much greater than if the case be one of genuine epilepsy.

Third—If genuine epilepsy be present we are in a position to give a much more accurate prognosis as to the ultimate outcome and to apply better principles in the treatment of the case.

Fourth—Remove as far as possible parental sympathy from the treatment of the child, for if allowed to assert its way this usually does more harm to the child than good.

Fifth—Endeavor to keep from the young epileptic the many patent nostrums that, when taken by him, only aggravate the disease by first masking the true symptoms of the same; second, by destroying or impairing the functions of the gastrointestinal tract.

Sixth—If the seizures be localised and a given part of the body chiefly involved at the time of convulsive phenomena, and suffers therefore exhaustion or partial paralysis as the result of same, apply physical means for its correction as soon as possible, for it will only be by these means that such a difficulty can be overcome.

Seventh—We must learn to place great value on little things in studying the etiology and treatment of this obstinate malady, and in illustration of this point let me say that it was my pleasure, in January of the present year, to see in the Pathological Museum, in Berlin, under direction of Dr. Rudolph Virchow, six cases in which the hemorrhage had occurred in capillary form in the brain. Dr. Virchow, without the use of any magnifying power, had no difficulty in locating the seats of these minute hemorrhages. He told me that these small hemorrhages, with their results had caused death.

Two weeks later I saw Dr. Hughlings-Jackson in London, and I asked him what, in his opinion, would be ultimately found to be the cause of perhaps the larger number of the so-called cases of idiopathic epilepsy. His reply was that they would be found to be due to capillary hemorrhage in the brain, followed by minute spots of soft-

ness. I at once associated what I had seen on the postmortem table in Berlin with the remarks of Dr. Jackson, and my regard for small things in medicine grew a hundredfold.

ESTABLISHMENT OF THE FIRST FREE MUNICIPAL BATH HOUSE AT BUFFALO, N. Y.¹

By ERNEST WENDE, M. D.,
Health Commissioner, Buffalo, N. Y.

IF THE prophecy of free public baths be fulfilled, its accomplishment will be largely due to the persistent efforts, and enlightened work of that eminent physician, Dr. Simon Baruch, the pioneer of scientific hydrotherapy in America. The object principally contemplated is the care of the morals, health and education of the masses, the ennobling among the poor of domestic and national life, to exchange unwholesomeness for healthfulness, and to rescue the weak, the needy and the necessitous from preventible disease. If prevention is better than cure, then the establishment of a free public bath is a greater blessing to mankind than the erection of a hospital. That prevention is better than cure is universally admitted, but the former process is too often neglected, while the latter is frequently unattainable.

It was in August, 1889, editorially in the *Philadelphia Times and Register*, that Dr. Baruch reviewed the subject of public baths, and briefly described those adopted in the German army and large German cities. Their arrangement is simple, economical, substantial, comfortable. The individual soaps himself, and is rinsed off clean by the fall of the spray-douche, the water flowing off through a latticed floor to the drain. Time, water, attendance is minimised, cleanliness obtained, danger of infection precluded by the completeness and simplicity of the system. He also advocates the rain-bath of warm water and soap as an adjunct in our public schools for the children, and also their use by the poorer class during the winter when their cleansing possibilities are limited. Such bath construction, he says, would popularize bathing, and protect against disease with but small expenditure.

A month later, at the Social Science Meeting held in Saratoga, N. Y., he read an article on Status of Water in Modern Medicine, a masterly paper, planning a bath with a capacity of 8,000 per day.

1. Read before the Medical Society of the County of Cayuga, at Auburn, N. Y., May 10, 1900.

Space prevents but mere allusion to his further endeavor at the New York Academy of Medicine. In the metropolis, as well, he has been the educator, elucidated and urged his proposition with the first reward of seeing it adopted in the New York Juvenile Asylum, where he is the attending physician, and, later, on a large scale, by the Association for Improving the Conditions of the Poor.

While the luxury and benefit of public baths have reached their highest stage of perfection in Germany, England, Austria and France,



SIMON BARUCH, M. D.

it remained for Buffalo, an American City, in competing for supremacy in the realisation of all the conditions desired by a cultured public, to establish a bath where the indigent, the fatigued and the unclean could find shelter and care "without money and without price."

This free public bath movement, inaugurated by Dr. Baruch, who was habitually bent on the contemplation and expectation of good municipal housekeeping, would have received earlier recognition, its utility extended, and its practicability demonstrated, had it not been blocked on several occasions by the legislature, whose primary

function is often not for the good of the city, but to gain some private ends, from interested motives, as the multiplication of offices, the fixing of compensation, or the replacing of an honest and competent official by a politician or an unqualified person.

The experience of Continental Europe and Great Britain, the dictates of common sense, the vital consequence of true progress, the necessity in the cause of decency, public health and cleanliness, and a knowledge of actual conditions in Buffalo long ago emphasized the humiliating fact of the shameful need and pressing requirements of public conveniences in this country.

In the winter of 1894-5, a sub-committee of the Buffalo Charity Organisation Society, which, through personal investigation of the tenement house districts, became familiar with the fundamental principles which underlie the need of poor families that lack home conveniences, and of the working classes that require bathing facilities as a common decency of life, took under consideration the question of establishing a free municipal bath house. This committee was composed of Dr. John H. Pryor, William A. Douglas, and William Lansing, assisted by the Health Commissioner. Its members, on more than one occasion, aided and sustained those entrusted with the administration of the laws affecting public health, and through the united efforts of this committee and the Department of Health, the proposition was brought before the Common Council, and advanced to a stage where the establishment of a free public bath, by our municipality, was an assured fact, and just as the provisions became favorable, and the necessary point attained, the State Legislature, through the able assistance of Mr. Goodwin Brown, and his capable coöperator, Assemblyman George W. Hamilton, enacted the subjoined measure entitled, "An Act to Establish Free Public Baths in Cities, Villages and Towns":

Chapter 351, Laws of New York State, 1895. Section 1. "All cities of the first and second class shall establish and maintain such number of public baths as the local board of health may determine to be necessary; each bath shall be kept open not less than fourteen hours for each day, and both hot and cold water shall be provided. The erection and maintenance of river or ocean baths shall not be deemed a compliance with the requirements of this section. Any city, village or town having less than 50,000 inhabitants may establish and maintain free public baths, and any city, village or town may loan its credit or may appropriate of its funds for the purpose of establishing such free public baths.

Section 2. This act shall take effect immediately.

In framing this measure, the constitution of the State of New York recognises cities of the first class as having a population of 250,000 or over; cities of the second class, 50,000 or more, but less than 250,000; and cities of the third class less than 50,000.

Its passage was of more than municipal importance, and, as might be expected on the 19th of April, 1895, Mr. Goodwin Brown wrote to Dr. Baruch the following congratulatory letter:

It affords me pleasure to inform you that the Governor, yesterday, April 18th, signed the bill to establish and maintain free public baths



HON. GOODWIN BROWN.

in all cities of the first and second classes; cities of 50,000 inhabitants and over. I expected that it would meet with opposition in the Governor's office, on the ground that it was mandatory legislation. I am delighted to say, however, that the Governor and his advisors showed themselves exceedingly broad and liberal-minded, and the Governor did not need any urging to promptly approve the measure.

"It affords me pleasure to say that the matter which you gave me enabled me to lay before the committee unanswerable arguments, and to you I largely ascribe the credit of the most important measure of the session."

Thus, by reason of the voluntary efforts of Baruch, Brown and Hamilton, a really comprehensive measure was placed on the statute book, and through the steady perseverance of Pryor, Douglas and Lansing, and the local health official, who recognised the fact that every community has an interest in the health and strength of its individual members, and that concerted action is necessary in order to obtain practical results, the City of Buffalo was prepared to take immediate action in the direction of this improvement and much needed reform.

Now placed upon the shrine of progressive municipalism, money was appropriated, plans were ordered, site selected, contracts let, and ordinances providing for attendants and management, passed, so that by January 1, 1897, the first absolutely free municipal bath-house in the world was established, completed in every detail and put into full and successful operation. It is officially known as Public Bath House No. 1, and the praiseworthiness of the public service rendered since its inauguration affords a record—173,912 baths to males, 5,824 to females, and 57,401 to children—a grand total for the three years of 236,137 baths, which would seem to justify the city's outlay.

Its patrons, recognising not merely the propriety but the necessity of bathing, know, without reference to figures, that its capacity has been overtaxed, demonstrating a much needed and entirely inadequate public convenience to exhibit the least equivocal successes and the most splendid triumphs of sanitation.

It is not only free, but open on every day in the year, from 7 a.m. to 9 p.m., excepting on Sundays and holidays, when those requiring a bath must observe the hours from 7 to 10 a.m. There is absolutely no charge for its use, no restrictive classification of users, soap and towels are gratuitous, with an unlimited supply of water, both hot and cold, the only restriction imposed being, necessarily, one of time—namely, that bathers cannot occupy an apartment longer than twenty minutes. Additionally, facilities are offered to wash and dry underclothing, so that the equipment of the establishment sends forth those which patronise it cleansed both in person and clothing.

This is at variance with the customs that prevail at the European municipal bath houses, where, in every instance, for equal bathing facilities, a fee is demanded. This is the case in Glasgow, Manchester, London, Birmingham; in fact, in all British towns where public baths have been erected. It is, likewise, true of Paris, Berlin, Vienna, Munich, Hanover, Göttingen, Frankfort, and in all other cities of France, Germany and Austria.

To illustrate, in Glasgow, where the public baths have cost more than \$600,000 and the bathers exceed 450,000 a year, a charge of two-pence is made for the use of the swimming bath, and a trifle more for private baths, with special rates for school children. In Frankfort, for instance, the price per bath is 2½ cents, including towel and soap, but the quantity of water allowed is measured and limited to 42 quarts.

It seems that in our American cities, too, it has been the



BUFFALO FREE PUBLIC BATH HOUSE NO. 1.

accredited rule to charge for these necessary innovations that improve the health and social condition of the people. For example, at the public baths in New York City, a fee of 5 cents is asked for their use. However, "tickets are granted on the most favorable terms to institutions, societies, churches and donors to the association's fund, so that the advantages of the bath may be wide-spread and extended."

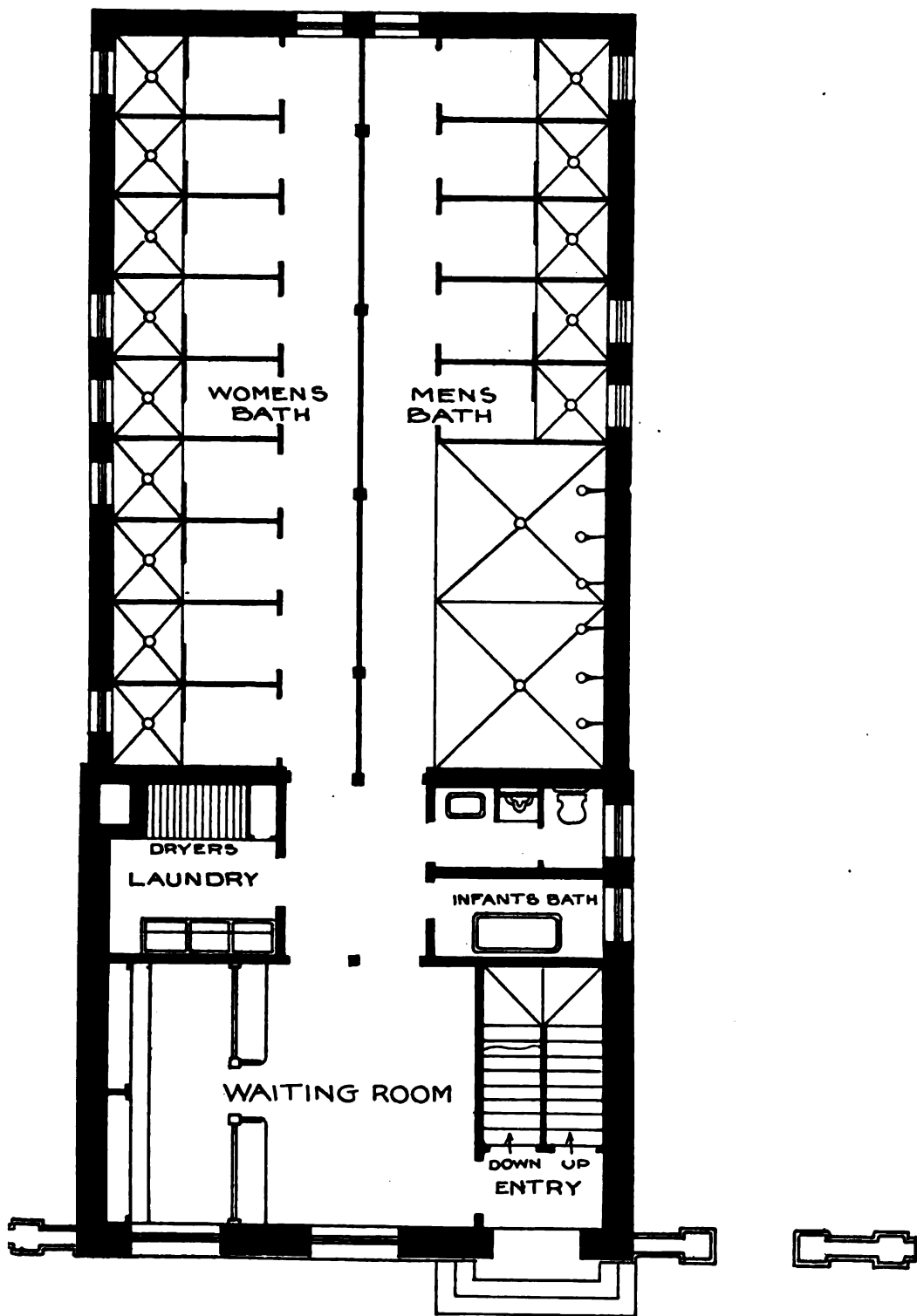
Therefore, to Buffalo belongs the distinction of being the first municipality to grant to the poor, the needy and the working classes, unconditional and without charge, bathing facilities *pro bono publico*.

It is hardly necessary to say that in the selection of the site, density of population, overcrowded tenements of the poor, and cheap lodging houses, where the transient and shifting find accommodation, were regarded as the important desiderata. It is located in Police Precinct No. 1, which has an area of only 0.86 square mile or about 2 per cent. of the entire area of Buffalo, yet, according to the police census of 1895, it has a population of 20,587 or 6 per cent. of the entire population, and this notwithstanding the fact that a very large portion of the precinct is taken up by railroad tracks, the Terrace, canal, docks, depots, public buildings, stores and manufacturing establishments.

Not long since, an investigation of tenements in this section was begun by Miss Marion I. Moore, assistant secretary, Charity Organisation Society, who found that 2,784 persons were living in 72 tenement blocks, of whom 1,198 were parents; 1,263 children and 323 boarders. 128 families were living in one room per family; 203 in two rooms, and 135 in three rooms. As bathing facilities, and, indeed, privacy of any kind, do not exist among these tenants, the establishment among them of a free public bath house is a real necessity. The wisdom of the locality selected was shown from the experiences of the lack of conveniences and facilities required, in that the waiting room was constantly crowded, in spite of the existence of fourteen compartments, into and out of which the bathers were hustled every twenty minutes. With this management, the capacity of the fourteen baths is capable of accommodating forty-two persons an hour. Besides, there is a large open space for children, provided with six showers, and in which as many as twenty boys have been domiciled at one time.

The lot upon which the bath house is located is triangular in shape, having a frontage on the Terrace of fifty feet. The building is of brick exterior, as shown in photograph No. 1, and was designed by Lansing & Beierl. It is two stories high in front, with living apartments for attendants in the upper one, and one story in rear with basement under all. A reference to the ground plan will show that the interior arrangement of the building consists of a waiting room, wash-room, toilet-room, infants' bath-room, and fourteen distinct bathing apartments, all on the first floor, while, on the second are found the quarters of the attendants, possessing advantages on the score of economy, safety, privacy and convenience.

The wash-room contains three laundry tubs of concrete, and a patent drying closet which, on economical grounds, affords an



GROUND PLAN OF BUFFALO FREE PUBLIC BATH HOUSE NO. 1.

opportunity of overcoming difficulties when the bather has but one suit of undergarments which have become soiled—a God-send to one possessing such a meagre wardrobe. The infants' bath-room has a porcelain bath-tub and is for children too young to go under the showers. One must rejoice to think that the little child of the tenement house district may enjoy such a luxury. In the bathing apartments, the walls are of brick, coated with enamel paint, the floors of concrete, and the partitions of slate in iron frames, all out of consideration that sanitation by water may go wrong in proportion to the defects in construction of absorbent or nonabsorbent material.

The system adopted is that of the rain-bath and inclined shower delivering water at a maximum temperature of 100 degrees, under the control of the bather as regards volume and decrease of temperature. This has fourteen individual alcoves, and six showers in one large open space. Each alcove is divided into two parts, the dressing room and bathing room, separated by slate partitions. The shower room has a depression in the floor, of six inches deep; all angles being rounded off and supplied with waste perforation, of adequate capacity to carry off the water as fast as delivered by the shower; thus water rises about four inches making a foot bath. The bather stands erect in the bath and the shower strikes the body only from the head down. The sanitary arrangement of the antiquated tub baths sinks into insignificance, when compared with this regulation or system.

The building for wholesomeness and comfort is heated by steam, with ample provisions for its employment as a cleansing and disinfecting agent, the practical advantage of which, in an institution of this kind, cannot be over-rated; and, as a matter of safety in the bathing-rooms, the coils are suspended from the ceiling, out of reach of the bathers. Furthermore, means for flushing with water are also provided.

Experience has shown that these rain-baths concern public hygiene, that their use is a necessity to be regarded as a religious observance, symbolic of practical christianity. The advantages which affect the animal economy, the home and the public, by virtue of their purifying and exhilarating sprays are:

1st Educational.—The teaching of personal cleanliness, morality and self-respect among the poorer classes, where bathing is neglected from lack of means; many being susceptible to the salutary impressions produced, desire and soon adopt like conveniences at home.



WENDE—WAITING ROOM AND OFFICE, PUBLIC BATH NO. 1.

2d Sanitary.—Owing to the structure and mechanism, it is always scrupulously clean; no water to defile; no filthy tubs to scour; no dirty floors to scrub; no possibility of contagion.

3d Economical.—Attributable to its appliances and fittings, less space is required, less water is needed, less time for bathing necessary; the cost of tubs avoided; the expense for their maintenance saved; the detention, for tubs to fill and empty, spared.

4th Invigorating.—From the tonic and refreshing action produced by the shower, causing a concussion of the water against the skin, having the effect of a powerful massage, very much unlike the depression that enfeebles after a warm tub-bath.

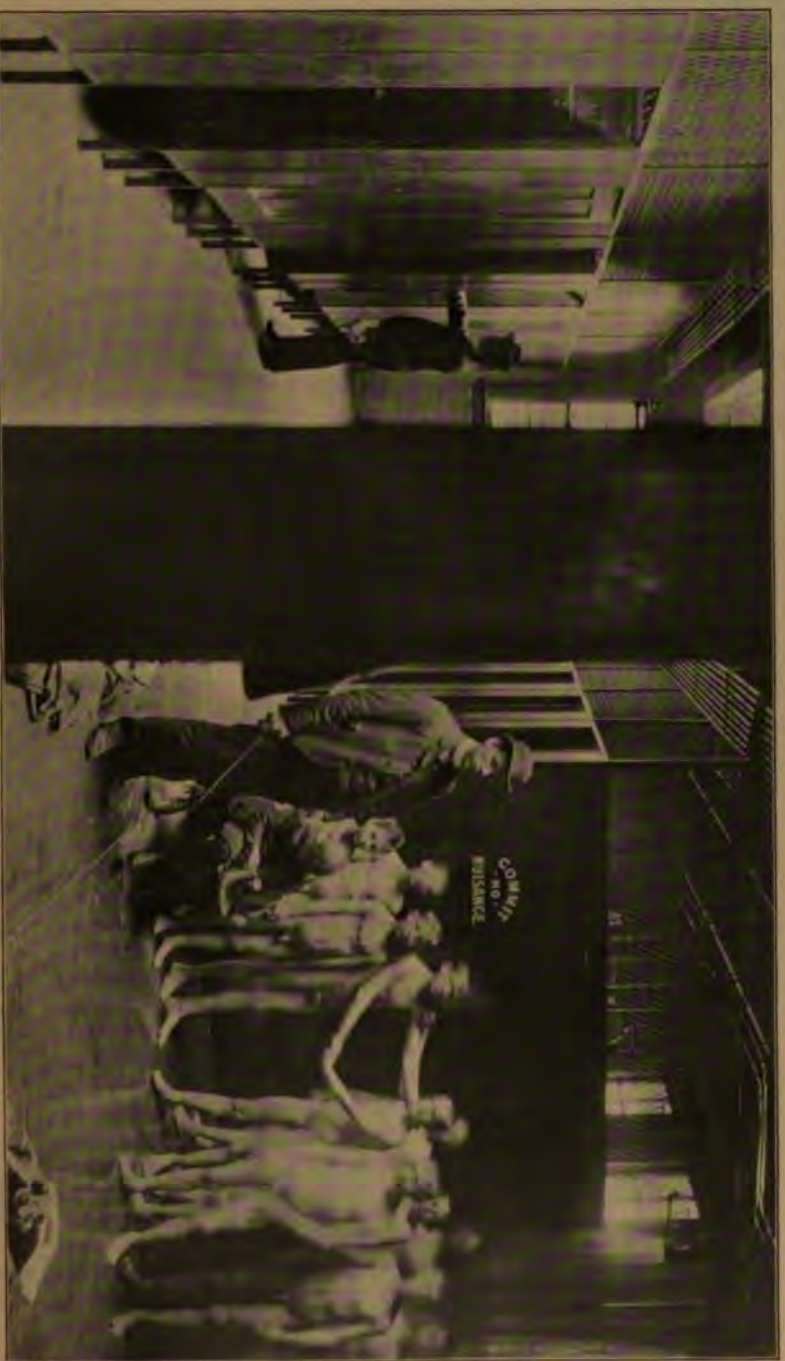
5th Thorough.—From the *modus operandi*, the process of applying water to the erect body by means of the douche or shower, the best desired effects of cleanness are obtained.

The consequence is, that amid the universal striving for improvement, sanitation is perpetually changing. Comparatively insignificant as this advance may seem, when measured by the period of the labors, and the number of the laborers, it is something to have to record a positive gain, however small, in a field of so much importance that is so often neglected. Respecting the management of the bath-house which is subjected to continuous care and daily observation of a keeper and his wife, and one assistant, under the supervision and approval of the Department of Health, the public is allowed to bathe with as little technicality as possible.

The following are the hours regulating the admission of male and female bathers: Week days—men and boys—7 a.m. to 12 m., and 5 p.m. to 9 p.m.; week days—women and girls—12m. to 5 p.m.; Sundays and holidays (for men and boys only) 7 to 10 a.m., and for their guidance as to deportment, the succeeding simple rules have been compiled in English, German, Polish and Italian and conspicuously posted :

RULES.

1. Smoking prohibited.
2. Swearing or obscene language not allowed.
3. No intoxicated person allowed in the building.
4. Walls, furniture or property must not be defaced or injured.
5. Soiled clothing must be taken away by the bather.
6. Towels must be returned to the keeper or matron.
7. Unused soap must be deposited in a receptacle provided for that purpose.



WENDE—UNDER THE SHOWER.

8. No bather permitted to occupy a compartment more than twenty minutes.

Statistics pertaining to Free Public Bath House No. 1, Buffalo, N. Y., are as follows:

Cost of site	\$6,500.00
" " building	8,000.00
" " equipment	300.00
	\$14,800.00

COST OF MAINTENANCE.	1897.	1898.	1899.
Salary of keeper	500.00	500.00	500.00
" " matron	400.00	400.00	400.00
" " assistant keeper	200.00 ¹	480.00	480.00
Cost of soap	232.77	141.56	102.74
" " coal	275.35	330.30	300.00
" " furnishing and laundering towels . .	384.37	400.02	406.18
" " incidentals		48.05	182.00
Totals	1,992.49	2,299.93	2,370.92

TABLE OF BATHS TAKEN.

MONTH.	1897.	1898.	1899.
January	3,851	5,918	4,045
February	4,357	4,219	3,919
March	6,612	6,633	6,389
April	6,984	6,356	8,094
May	7,206	7,406	8,057
June	9,291	9,860	9,627
July	9,536	10,221	10,398
August	8,773	9,319	10,829
September	7,064	7,372	5,661
October	5,720	5,138	6,172
November	3,576	3,261	4,576
December	3,903	3,678	4,026
Totals	76,873	78,481	81,793

Of the above baths, were taken as follows:

	Men.	Women.	Children.
1897	55,051	1,395	20,427
1898	58,832	1,841	17,808
1899	60,029	2,588	19,176

The wash-room and dryer was used by 1,542 persons in 1897; 2,821 persons in 1898, and 3,166 persons in 1899.

1. Five months.

It will be found, in computing the interest on the original investment, added to the amount required for maintenance, that the cost to the city has been a fraction over 2 cents per capita for bath and laundry.

I would say, finally, that the avowed policy of many municipalities is to practise a maximum of extravagance, in the belief that such extravagance benefits the poor; on the contrary, it must be borne in mind that the establishment of free public baths should bear a certain proportion to the composition, character and density of population, and that the construction of palatial buildings for this purpose, costing a \$100,000 or more, thereby saddling the taxpayer with an unnecessary expense, is indefensible. Architectural pretensions lead to a deterioration in the public health and morals. To facilitate their usefulness, their exterior should be plain and modest, so as not to repel the poor and lowly, and their interior neat and clean, with no harrassing rules and regulations. Buffalo's Public Bath House No. 1 is such a structure, unpretentious and relatively inexpensive.

Again, our municipality, under the authority of the state which establishes and places, under the control of the Department of Health, free public baths, calculated to improve the social conditions of the masses, a second establishment is now in the course of erection, and by the 1st of July its completion is contemplated for indiscriminate use. It is practically modeled upon the same lines as the first, for ease, comfort and economy of administration, likewise situated in a densely crowded section of the city, only with a larger capacity for daily use by men, women and children, without alternating hours, which will meet the indications more fully in an equally beneficial and worthy manner.

471 DELAWARE AVENUE.

ERYSIPELAS.¹

By A. A. YOUNG, M.D., Newark, N. Y.

ERYSIPELAS may be defined, so far as the ocular manifestations are concerned, as an intense specific dermatitis, an inflammation in which the lymph channels are largely, if not entirely involved.

That this disease is induced by the deposition and growth of specific microorganisms, apparently the streptococcus pyogenes, can scarcely be doubted. The disease is certainly contagious, and as

1. Read at the thirty-second annual meeting of the Medical Association of Central New York, at Syracuse, October 17, 1899.

such the inducing agent must have reproductive powers which are capable of self-growth and self-development. Microorganisms, like other organisms, do not spring into being from nothing, full grown, there must be a germinal vesicle however small; there must be a period of growth however short.

What is true of the development of organic life in the macroscopic world must be inferentially true in the microscopic world; what is so apparent in the development of insect life must be practically true in the development of other forms of life, though not so apparent to the senses. The streptococcus can form no exception to the rule, it must have its beginning, it must have its active period of development, reaching to and ending in perfectness before it accomplishes its biological cycle and is prepared for the process of reproduction of its species. It may require but an hour for it to complete, under favorable conditions, its biological cycle, but that short period does not affect the process. Its embryonic life, though short, must exist.

I have said that erysipelas is a violent inflammation of the lymph channels, but that is only the ocular manifestations of it,—its local phase. In and about the lymph channels specific streptococci may be found in abundance, but it is doubtful if their development occurs at the point of inflammation. The inflammatory patch is apparently the nidus of the fully developed coccus, while the developing coccus occupies other portions of the body making of the affection a systemic rather than a local one.

In true cutaneous erysipelas there are premonitory symptoms consisting of a chill, fever and general malaise in a variable degree prior to the appearance of the eruption. This is a marked indication that the affection is a systemic one and that the germ develops elsewhere than in the lymph channels, and occupying the lymph channels only after development has been completed. There is a similarity of method between the development of erysipelas and the eruptive fevers, sufficient similarity that if the latter be constitutional affections with local manifestations then erysipelas must be so classed also.

It is of but little moment whether a case of erysipelas be idiopathic or traumatic, the inducing agent must be a like coccus, having like powers and like methods of development; and its successful treatment must be accomplished by similar methods and means. Under our present knowledge, then, the division of erysipelas into idiopathic and traumatic can readily be dispensed with, for it only shows a method of entrance and not a method of development; how a germ enters is comparatively valueless to how this same germ may be

destroyed and eliminated, it is therefore the province of medicine to accomplish the latter as immunisation is, as yet out of the question. It is still questionable whether erysipelas is transmissible directly from parent to child or not; there are some conditions at least that indicate the truth of the assumption that it is so transmissible. That the disease may begin in the individual child and continue through life appearing at intervals more or less frequent is a common observation.

If in the child there be recurrent attacks coming apparently from unknown and undiscoverable sources; if the disease be a constitutional one and not an independent and isolated dermatitis, then it is easy to infer of the transmissibility of the affection from parent to child; if it be not hereditary then it must be admitted that abnormal conditions or weakness are transmitted to the child, which make the entrance and development of the specific germ comparatively easy, whether such development be in the skin, the cellular and intermediate tissues or in some other and more remote medium of the body—this medium I believe to be the blood itself.

The entrance of the coccus, as a spore or as a fully developed organism, may be by way of the skin and the inflamed area may enclose the point through which it entered, but this act alone does not constitute the disease—there must be germ development beginning with or even prior to the febrile manifestations; there must be a period of incubation, a period of development and a period of perfectness, short though these periods may be. Inferentially the developing coccus is in the blood stream, active and growing; an activity that produces the febrile disturbances and general malaise, which precede the characteristic eruption, and eruption marking the home of the fully developed coccus in which home it prepares itself for the office of reproduction by depositing its germinal vesicles which can be readily absorbed into the blood stream, forming a new or reinfection.

Immediately with and following upon germ invasion, phagocytes increase and multiply in number and in proportion to this increase together with the amount of vitality which they possess, is the severity of the disease lessened; increased phagocytosis means decreased morbid conditions.

Concerning the three phases or conditions of erysipelas, viz.: the cutaneous, cellulocutaneous and cellular, I do not care at this time to consider for they are doubtless of the same variety, produced by a like coccus though treatment must be modified considerably for each

existing condition; the treatment for the former being almost exclusively medical, while for the latter medico-surgical.

Regarding the disease as a systemic one and of microbic origin, and from which conclusion legitimately the inference is drawn that the coccus develops within the blood or other circulating fluid of the body, then two lines of treatment are suggested, both tending to the same end, viz.: the destruction and elimination of the specific coccus. There must then be an internal medication, systemic in character, one which will modify and devitalise the developing coccus. Nature has already furnished such an agent in the phagocyte, the multiplicity and activity of which ought to be encouraged. For this purpose one of the most satisfactory preparations that has come under my observation is nuclein, to its revitalising properties the system most quickly responds, as a stimulant to phagocytosis its value is most apparent.

In accordance with custom, quinine and iron, preferably the sulphate, on account of its greater antiseptic properties, have been prescribed and with apparent good results. It appears that the benefit to be derived from these agents comes largely from their germicidal properties, checking the growth and perhaps destroying the semi-developed coccus by contact.

Since by theory the inflamed area is the nidus of the fully developed coccus, a theory applicable to all specific eruptive fevers, most important, then, is external medication; by the use of germicides we are able to modify and even destroy the coccus before it begins its process of reproduction which means systemic reinfection. To destroy the coccus *in situ* must be the aim of local medication.

In passing, allow me to add that the use of the poultice or other hot fomentation, recommended in our text-books frequently, I most unqualifiedly condemn, it is a useless non-aseptic and nasty appliance; it is doubtless a germ developer instead of a germ destroyer.

The medicinal agents which have served my purpose best are aconite and sulphate of iron, applied over the entire inflamed area. Formerly the tincture of aconite was used with the iron, but it made of the patient an unsightly being, though these agents were effective in their action. During later years aconitia has been substituted for the tincture of aconite with equally good results and thus escaping the disagreeable color produced by the latter.

It is doubtful if aconite possesses any direct germicidal properties, but its sedative properties are marked, and by virtue of which it lessens in extent and severity inflammatory action by rendering inactive

the agents that produce it; time is thus allowed for their destruction and expulsion by other methods and agencies.

As a germicide and one specially fitted for this specific coccus, and many have been tried, I have found nothing that equals the sulphate of iron in efficiency, its activity seems to be increased however by combining it with some preparation of aconite preferably aconitia; from this combination I have obtained none other than satisfactory results.

In the administration of these drugs only one object is sought for viz.: the destruction of the coccus in its nidus, in the inflamed dermal patch. This work these agents do well.

Since erysipelas in a certain degree is a specific eruptive fever and corresponds to the type of such fevers, as might be expected, we have exfoliation of the affected skin; then as a precautionary measure a solution of formaldehyde for bathing purposes daily is advisable. In the cellular variety usually the aid of the surgeon must be invoked, and the débris allowed to escape early, after which antiseptic dressings must be applied and free drainage continued so long as active streptococci remain. This wound forms a means of exit, not for the local, fully developed cocci alone, but for the developing ones found elsewhere as well.

In these surgical cases strict asepsis and strict cleanliness are imperative; the adage here applies with peculiar force that "Godliness is next to cleanliness."

22 E. MILLER STREET.

CURETTAGE OF THE MALE BLADDER FOR CHRONIC CYSTITIS.¹

REPORT OF A CASE.

By NATHAN W. SOBLE, M. D., Rochester, N. Y.

THE object of this short paper is to invite attention to the operation of curettage of the male bladder for chronic cystitis, and to report a case treated in that manner with favorable results. There are cases of chronic cystitis, nontubercular, that will not yield to any ordinary treatment. There are other cases that have gone so long untreated, or have been improperly treated, in which the ordinary methods in vogue will do no good.

1. Read before the Surgical Section of the Rochester Academy of Medicine, April 11, 1900.

It is not the reader's purpose to touch, at all, the usual modes of dealing with cystitis, except to say, that in those severe, persistent, seemingly incurable, pathological changes in the mucous membrane of the bladder, when medical treatment has failed, resort should be had to more radical surgical means. Drainage of the bladder, either by perineal or suprapubic routes, will cure some of these cases, but not all; it is in these cases that curettage should be done. Drainage, curettage and irrigation are advocated by many authorities, especially in France, where Guyon may be mentioned first.

Legnum, in the *Annual* for the genito-urinary diseases, advises these methods of treatment. In the same journal, June, 1897, Banzet says, "In chronic, persistent cystitis, in the male or female, curetting the bladder, followed by thorough irrigation and drainage, has yielded the best results."

Bardenheuser, in the *Centralblatt für Gynekologie*, No. 14, 1894, is even more radical, reports a case where he dissected away the entire mucous membrane of the bladder and claims that the vesicle mucosa is renewed as is the endometrium after curettement.

Cathcart, *British Med. Jour.*, October 5, 1895, claims to have originated the plan of drainage of the bladder by the exhaust pump method after suprapubic cystotomy.

Dawbarn, *New York Med. Jour.*, November 19, 1895, denies this and says that Dr. Swan, a dentist of Rochester, N.Y., originated this method and used it long before Cathcart.

It is found on searching the recent medical literature on this subject, that many authorities mention the operation of curettage of the bladder, especially in tubercular cystitis.

Case I.—D. D., German, aged 36, married eight years; one child; lithographer by occupation. First consulted the reader January 6, 1900. Present weight, 120 pounds. Usual weight, 170 pounds. No venereal disease; past health good. When twenty-three years old, had a congenital growth removed from the head of the penis in a hospital of Heidelberg. This operation resulted in a cicatricial contraction of the meatus urinarius. He was perfectly well up to July, 1895, when, after a picnic and having partaken of the usual refreshments—beer—he was attacked, for the first time, with sudden retention and pain in the region of the genitals. After suffering for some time, he was catheterised by a physician who evacuated three quarts of urine; this relieved him for three days, during which time he was able to pass urine, but with some difficulty. Then he gradually grew worse, when another physician did a meatotomy, after which he bled very profusely; when the wound healed he was much better and remained so for four months. He then became

worse again, had frequent and painful urination, and passed blood often; he could not hold his urine but a short time and was unable to work. Then the meatus was again cut, and he was again relieved for a time, so that he could hold urine for three or four hours. Sounds were now passed for a short distance into the urethra, every third day, for the purpose of maintaining the caliber of the meatus.

While this treatment continued he was fairly comfortable. Then after a certain sounding, something seemed to "give way;" there was a sudden hemorrhage, after which the pain and trouble with urination all returned, and have remained constant ever since, for a period of two and one-half years. All treatment has been of no avail. At about this time a small gravel was passed. The history of this man's sufferings during the past two and one-half years is pitiable in the extreme.

Status præsens.—The patient is thin, pale and looks much worn from long suffering. Penis shows some hypospadias; meatus much contracted; has to urinate every twenty minutes day and night, and each attempt is attended with pain and stranguary; carries a catheter which he introduces and wears in order to get a little relief—without it he is in constant pain.

Urinary Analysis.—Alkaline, ammoniacal, thick with ropy mucus. Specific gravity, 1036. Albumin. No sugar. No casts. Blood, mucus and pus in abundance. Over 50 per cent. of the urine, by volume, is sediment and pus.

Only two ounces of water could be injected into the bladder without causing extreme pain. No prostatic enlargement. Repeated microscopical examinations made by Drs. Koch, Ruggles and the reader did not demonstrate any specific germs.

January 10, 1900.—Under ether the meatus easily dilated and a full-sized sound was passed into the bladder. No strictures below the meatus. Thompson's searcher passed easily and failed to find any stone, but the beak of the instrument seemed to rub against something soft. Capacity of bladder under ether, four ounces.

July 13, 1900, at St. Mary's Hospital, in the presence of Drs. Koch and Ruggles, suprapubic cystotomy was done and the bladder was stitched to the parietal peritoneum. Then the bladder was opened and inspected through the wound. The entire cavity of the bladder could be easily seen; there was no stone, and no tumor; the cavity was small; walls thickened and the mucous membrane apparently very red and shining, smooth in the main, though some rugosities could be felt with the fingers in the region of the trigone and internal opening of the urethra. The most striking feature was the extreme redness and inflamed appearance of the mucous membrane of the bladder.

For the next three days no urine was allowed to pass through the suprapubic incision; a catheter was fastened to the urethra. After

that time the bladder was kept drained by syphonage and irrigated twice daily. It seemed remarkable that although nitrate of silver was injected into the bladder in fairly strong solution, up to 10 per cent., no pain was caused. Although the patient was rendered comfortable by the operation, obtaining rest and sleep with a consequent improvement in his general condition, there was not the slightest improvement in the condition of the bladder, which was examined frequently by the aid of a light, neither was there any change in the character of the urine—this remained as vile as before.

In spite of thorough drainage and frequent irrigation, up to February 9th there was no improvement in the condition of the bladder. On this date, the notes of the case state: no improvement in condition of urine; general condition of patient better; comfortable; temperature normal; external wound smaller; bladder irrigated by permanganate of potash, 1-2000, followed by sterile water twice daily. At this time it was decided to curette the mucous membrane of the bladder, through the suprapubic incision, for the purpose of removing what seemed to be a thickened, reddened and diseased epithelium, with the hope that a new, healthy epithelial layer would be formed.

The patient was anaesthetised, the suprapubic opening dilated, and a small sharp uterine curette introduced. Extreme caution was exercised in the use of this instrument, very gentle force being used, and yet the curette penetrated into the wall of the bladder for a half inch or more; this could be done in any part of the bladder, the depth varying from a half inch to one and one-fourth inches in different portions of the bladder; the deepest places were in the most dependent portions of the bladder.

What at first seemed to be a highly inflamed epithelial layer, was in reality a plastic deposit, an exudate covering the entire mucous membrane of the bladder, rendered smooth and glistening by hydrostatic pressure. The exudate was thoroughly curetted and at the first sitting it could not be all cleaned out; the quantity seemed unlimited, and although the patient was kept under ether for nearly two hours, healthy bladder was reached only in portions. The bladder was then thoroughly irrigated. Hemorrhage was not particularly marked.

A second curettement was done ten days after the first. At this time healthy bladder wall was soon recognised by the sound of the curette scraping on healthy tissue. After the operation the cavity of the bladder was considerably increased and the patient began to improve at once. The urine became clear almost immediately and in

three weeks' time was nearly normal. At the expiration of six weeks the external wound was healed, the patient was walking about, urinating every two hours during the day, and less often at night. He has gained thirty pounds in weight.

267 ANDREWS STREET.

PERSONAL EXPERIENCE WITH FRACTURE OF THE HIP.¹

By GEORGE WALTON GREENE, M. D., Auburn, N. Y.

ON THE third of July, 1897, I was so unfortunate as to fall from a ladder, striking with great force on the great trochanter of the right hip. Gentle hands quickly bore me to the house and laid me on the bed. Three surgeons were quickly summoned and proceeded to examine me. There was something peculiar, indescribable about the pain, something that I had once before experienced, which told me in unmistakable language that my hip was broken, and I told them so before they picked me up. After getting me under the influence of ether, they went carefully through all the various motions and measurements that are described in the books to be followed in injuries of the hip without finding anything. There was no apparent shortening; there was no eversion; there was no crepitation. A line drawn from the tuberosity of the ischium to the anterior superior spine of the ilium passed directly over the great trochanter of the femur. Nothing in fact to denote fracture.

Who could blame the physicians, all experienced men, for saying fracture did not exist? But remembering my being so positive in the matter, they very wisely put on a splint and extension. When visiting me the next day the occurrence of severe pain and the peculiar symptom known as sub sultustendonon, quickly settled the matter in their minds—a fracture did exist. Nor can I blame them for failing to find the fracture. I once had an exactly similar case. A man fell from a tree. A glance told me I had a fracture of the forearm; but his hip was different, the man suffered from pain, and insisted that "something was busted." But yet I was unable to detect it, and decided that fracture did not exist. I did not act so wisely as the physicians who attended my accident. I did not dress it as a fracture. However, when I visited him in the morning, I found his

1. Read at the thirty-second annual meeting of the Medical Association of Central New York, at Syracuse, October 17, 1899.

leg lying on the external maleolus, fully an inch shortening, and on the slightest motion marked crepitation. Then I began to realise that there was certainly "something busted."

These two cases prove to my mind conclusively one thing not mentioned in the books at least, so far as I am able to learn, viz. : that the opinion of the injured man must be given some weight, especially if he be a man of fairly good intelligence. In regard to the pain, I think this subject has been sadly neglected by authors. Stimson says in his valuable book while treating of symptoms, "Pain is sometimes so severe as to require a full dose of opium to relieve it," while under treatment he entirely ignores the subject. Hamilton says that the pain is sometimes so severe as to require opium by the mouth or the use of the hypodermic. The American Text-book of Surgery says practically the same thing.

I think that all present, who have treated a large number of cases of hip fracture, have witnessed the suffering, have heard the cries of pain, will agree with me that the subject deserves something more than a passing remark, especially if they have passed through the same ordeal themselves.

There are three distinct varieties of pain: First, the subsultus or contracture of the muscles crossing the fracture. The patient, worn out by suffering, begins to be calm, perhaps to doze. All at once there is a violent contraction of the muscles, the patient awakes with a scream. The slightest touch of the foot or bed-clothes, a cough or sneeze or even a long breath, will cause a renewal of these symptoms. The treatment of this condition is by extension and anodynes. Extension is put on to prevent shortening and relieve pain by tiring out the muscles, thus preventing tonic contraction. In my case I recovered with one and one-half inch shortening, the same amount as my other leg, without extension. In regard to pain in my case, it was an utter failure. If it ever becomes my duty to treat a similar case, I shall not hesitate to put on fifty or even sixty pounds, keeping the patient from slipping to the foot of the bed by a well-padded strap from beneath the shoulders to the head of the bed. Two or three days is generally sufficient to produce complete relaxation. But two or three days of suffering, such as accompanies such injuries, is a long time to wait. Is it any wonder that physicians resort to opium? But authorities do not say anything about the method of administration or the dose. It was a principle that I was taught when in college, that when you give medicine to produce a symptom, that unless you produce that symptom you fail. Pain being the

symptom that you wish to overcome, in this instance you should give morphine, regardless of dose, until you allay the pain. In my own case one-eighth grain produced no result, one quarter of a grain only a temporary quiet; but one-half grain given by hypodermic produced a restful night. Think of it! Half a grain by hypodermic needle. That is equal to a grain taken by the stomach. There is one objection to the use of morphine or opium: it seriously constipates the bowels. The same condition affects the bladder and renders the use of the catheter necessary. So inactive were my bowels and the inability to use the necessary muscles that it was impossible for me to empty my bowels, even of flatus. Under such conditions you can see the serious objection to the use of opium. There is, fortunately, one salt of opium which, while retaining the narcotising quality of opium, does not produce this serious condition. I refer to codein, a drug that I think should be more largely used in general practice. If I am ever called to treat a fracture of the hip, I shall give it in doses anywhere from one-half to two grains, not being alarmed at the dose till the desired effect is reached—cessation of pain.

The second variety of pain is backache, which is entirely due to the confined position. This is the most unfortunate form to treat. No physician would be so unwise as to give opium, no matter how much the patient complained. I think this symptom is best treated by slight changes in the position. Put a pillow under the shoulder; in a short time remove it and put under the hips; when the patient begins to complain, withdraw it, and put under the small of the back. Put a hot water bag under one hip, and then under the other, and then under the small of the back. All this will require the constant attention of an experienced nurse. But constant attention is the only way that the unfortunate victim can be made any way comfortable.

The third form is also due in general to the confined position. It is a sort of a neuralgic pain and differs materially from the agonising spasmodic jerking of the muscles. Sometimes in the ankle or the hip, more frequently in the knee; it comes on more frequently in the night, when the patient is worn out and exhausted, and sleep would be refreshing. A pillow or book should be placed under the knee or ankle or both, and thereby change the position. Many times during the long months of my suffering, I would say to my faithful wife, "Raise my knee by putting the book under it." After examining it she would say, "The book is already there"; then I would say "raise it higher by putting a small pillow on the book or take it out

entirely." I had learned by experience that all I wanted was a change of position.

There is one point about fractures in general, where I think practitioners are seriously at fault. Not that authors on surgery are not posted on the question, but they do not lay stress enough on the fact. I refer to tight bandages. I know one young man who lost part of his hand, and another who was seriously threatened with gangrene of the ankle from this cause. In treating any fracture, I always lay particular stress on the fact that if the bandage is too tight they shall cut it. The first night after my accident, owing to swelling of my limb, I suffered severe pain in my ankle. I pleaded and beseeched them to cut the bandage, but to no avail. The doctor said nothing about cutting it, and if he thought it ought to be cut, he would have told them so. At last, at my earnest solicitation, they called Dr. Hyatt, who fortunately lived next door, and he immediately cut the adhesive plaster about the ankle. Relief was instantaneous.

After laying on my back for three months, we removed the extension and splints, under the belief that firm union had taken place. What was my surprise and disappointment, however, on a slight motion to feel crepitation. Notwithstanding the argument of my medical friends that it was all imagination, I would not be convinced. When well marked shortening occurred, they too gave in. Union had not taken place. We now called Dr. Creveling in consultation with Dr. Cheesman, and he proposed a plan that was new to me, which I think was entirely original with him. A short time afterward, I read an article by Dr. Senn, of Chicago, and Dr. Schaffer, of New York. Dr. Senn advocated putting a tourniquet around the hip with sufficient force to compress the fracture and get up enough irritation to cause union. Dr. Schaffer elevated the knee on an incline, putting a frame around the hip with a screw, by means of which firm pressure is produced on the great trochanter, but Dr. Creveling's method was the simplest. He advised, after padding the hips, to put a strong elastic bandage around the body and get up the same irritation as the others advised. Dr. Stimson, in the last Annual of Medicine, advised exactly the same method. Now I wish to say a few words about bony union, nonunion, and fibrous union. If, after three months in bed, the extension is removed and no immediate shortening takes place, if, when the patient gets up on crutches, the limb is painful and weak, but no crepitation is felt, then I think you could safely say that bony union was taking place; but if, on removing the extension, immediate softening

takes place, possibly eversion, and on the slightest touch, well marked crepitation, you could with equal certainty say there was nonunion; but if, on removing the extension, no immediate shortening or eversion occurred, if when the patient got on crutches, there was crepitation which gradually diminished and finally ceased, if eventually the patient had a useful limb, then you would say that firm fibrous union had taken place. Such is my case.

DISCUSSION.

Dr. A. CLIFFORD MERCER, Syracuse, N.Y.—Just one point. The *x*-rays were not used in this fracture and it would seem from the experience which is being gathered, I think, in more places than we are aware of, that the *x*-ray is going to be the thing which will be helpful at one point in this experience where help was lacking for a while. In some of the hospitals, an enormous amount of work and experience is being gathered. Last November, in one of the Boston hospitals, I found they had made over 5,000 observations, and that is only a little of what is going on quietly, I imagine, all over the country everywhere.

But to the point. It happens that today, in one of the shop windows in Syracuse, are exhibited five radiographs. They are exhibited in a window in the University Building, the Thompson Art Store. Those five radiographs were made by Prof. Goodspeed, of the University of Pennsylvania, about the time of this fracture, I think. If it had only been in Philadelphia, there might have been some light thrown on it. Those radiographs were seen by Lord Kelvin while he was here and they are pronounced to be the finest that have been produced in the world; and if there are any members present who are interested in *x*-ray work, there is an opportunity to see the high water mark of *x*-ray work. I think, if you see these radiographs, you will say that if pictures of fractures can be made—these are normal pictures—as well as these normal radiographs show up, there will be no question about the diagnosis of fractures in future. They are so good that I wanted this opportunity to make the announcement so that you may see them, if you choose to.

SOME MANIFESTATIONS OF LITHEMIA IN THE YOUNG.¹

By MAUD J. FRYE, M. D., Buffalo, N. Y.

THIS paper is based upon and, indeed, may be called a partial résumé of work done by B. K. Rochford, of Cincinnati, who is both pediatricist and physiologist, and whose interpretation of some of the disease manifestations in early life has the double merit of originality and helpfulness.

1. Read at the annual meeting of the Medical Society of the County of Erie, January 9, 1900.

Lithemia may be defined as an autointoxication, caused by the presence of an excess of alloxuric bodies in the body media. Some of these are uric acid, xanthin, hypoxanthin, heteroxanthin and paraxanthin. They are suboxidation products. Concerning the properties of members of this group, Dr. Rochford has this to say—the result of laboratory and clinical observation:

Uric acid and its compounds are not poisonous.

Paraxanthin and heteroxanthin are very poisonous leucomaines, not uncommonly associated in their elimination with uric acid. They are found in such small quantities in normal urine that their poisonous properties are lost in dilution.

During lithemic attacks, paraxanthin and heteroxanthin are excreted in enormous excess, the urine of these patients not containing such excess at any other time.

These bodies are excreted, but not formed by the kidneys. Their presence in the urine means that immediately prior to their excretion they were present in the blood. Paraxanthin and xanthin, separated from the urine of patients suffering from certain lithemic manifestations, are capable of producing in the mouse and guinea-pig a group of symptoms similar to those from which the patient suffered. No other poisons have been demonstrated in lithemic urine which are capable of producing the symptoms of lithemia.

The etiological factors in lithemia, which Dr. Rochford names are three—heredity, overfeeding and under exercise. Upon the first of these as a factor in early life he lays great stress: "Lithemia in infants and children always means that one or both parents suffer from some phase of the uric acid diathesis." He regards lithemia as a specific and not a degenerate inheritance.

A wide variety of symptoms are attributed to lithemia in the adult, and Dr. Rochford finds it the explanation of many ailments of early life. Three groups of cases, in which he considers the underlying cause to be lithemia, have seemed to me to be of especial interest. The first of these is named "Inanition Fever," by L. Emmet Holt. Description of it is as follows:

"Under this head are included cases seen during the first five days of life in which there is an elevation of temperature, apparently due to the fact that the infant gets very little, frequently nothing at all from the breast at which it is being suckled. . . . The symptoms presented by these infants were a hot, dry skin, marked restlessness, dry lips, and a disposition to suck vigorously anything within reach. With very high temperature there was considerable

prostration and weakened pulse. With less severe cases there were only crying and restlessness. The rapidity with which the symptoms disappeared when the children were wet-nursed or properly fed was very striking."

Rochford interprets these not uncommon cases to be due to irritating uric acid deposits in the urinary passages of the infant. Crandall, writing under the title "Inanition Fever," in the *Archives of Pediatrics*, March, 1899, observed the symptom on which Rochford lays stress, that the urine in these cases is usually scanty, accompanied by copious discharge of urates at the height of the fever. Whether the explanation suggested by Dr. Rochford be the true one or not, it is interesting and reveals a hidden merit in the various teas with which the old-fashioned nurse loves to dose the new-born.

A second group of cases is styled by Rochford a lithemic gastric neurosis. This has been designated by others cyclic vomiting. Holt describes the disease as follows: "Characterised by periodical attacks of vomiting, recurring at intervals of weeks or months without any adequate exciting cause. The vomiting is severe and uncontrollable, and usually lasts from twelve hours to three days. It is attended with symptoms of general prostration, which may be alarming. The children who are subjects of it may show in the interval nearly all the signs of perfect health." Rochford gives the symptomatology thus: Lithemia may manifest itself in very young infants by attacks of gastric pains associated with rapid breathing, nausea, vomiting and fever. The gastric paroxysms may be so severe that all food is rejected for a period of from one to five days. The temperature may reach 104° or 105° F., but sometimes in the most severe cases the fever ranges between normal and 102°. In these attacks the infant may be prostrated to the last degree and there may be also much emaciation. Occasionally these lithemic paroxysms are ushered in by convulsions, which may in time come to be characteristic symptoms of these attacks. These gastric paroxysms are self-limited and are but little influenced by treatment. The stools following these attacks are very putrid and in young infants on a strictly milk diet are sometimes oily in character. Similar attacks usually styled gastralgia or enteralgia occur in the adult. In children these attacks tend to become of the true migrainous type in later life.

Dyspnea Rochford observed to be one of the most characteristic symptoms of paraxanthin poisoning. A form of this—very rapid breathing—is seen in combination with the gastric neurosis, not

depending on fever and not explained by bronchial or pulmonary disease. He states that lithemic asthma occurs only in adults. Personally, I have seen a case of asthma occurring in a child of four of marked lithemic habit. This child in addition had adenoids, which were believed to be the chief cause of the asthma. He was not cured of the asthmatic attacks by their removal, though the operation, or the antilithemic treatment or both, somewhat reduced their frequency.

A further interesting observation made by this investigator is that the menstrual function is closely associated or coincident with the sudden appearance of a great excess of paraxanthin in the blood and urine of lithemic patients—a possible explanation of some forms of dysmenorrhea. Thyroid feeding may result in the appearance of an excess of paraxanthin. Rochford suggests that a hyperactivity of the thyroid which its enlargement at the menstrual period makes probable may be the explanation of the increase of paraxanthin at that time.

It is hardly necessary to state that the urine of the lithemic attack is scanty, highly acid, of increased specific gravity, throwing down a deposit of urates on standing. In cases of migrainous gastric neurosis, Rochford has found albumin and hyaline casts, the urine becoming normal with the disappearance of the symptoms. The detection of paraxanthin is not practicable in ordinary work, the process being complicated and requiring about three weeks' time for its completion.

Rochford speaks of the tendency of one form of lithemia to pass into another as the child grows older. A little patient of mine in whom after some time I discovered the lithemic basis of his symptoms, began, when about nine months old, to suffer from periodical attacks of dyspnea, styled croup by his mother. I never saw him during one of these paroxysms and cannot describe their exact character. After a variety of remedies of greater or less uselessness had been tried by his physician and his mother, including a black silk string tied around his neck by the latter, the urine was examined, found of lithemic character, and antilithemic treatment instituted. The attacks of dyspnea practically disappeared, but the child now has at rather long interval a mild attack of lithemic gastric neurosis, vomiting everything taken for twelve or more hours. These attacks are accompanied by slight fever, and the usually limpid urine stains the napkin. At times some error in diet has been fancied to provoke the attack, but the severest one from which he has yet suffered was

without explanation, aside from lithemia. The mother of this child gives a lithemic history.

If apology is needed for presenting so incomplete a paper, I offer as such the help which the recognition of the lithemic element in early life affords in managing many little patients.

224 ALLEN STREET.

Society Proceedings.

BUFFALO ACADEMY OF MEDICINE.

Section on Medicine, April 11, 1900.

REPORTED BY J. C. CLEMESHA, M. D., Secretary.

THE seventh regular meeting of the Medical Section, Buffalo Academy of Medicine, was held at the Academy parlors, Market Arcade, April 11, 1900. Meeting called to order 8.30 p. m. Dr. E. H. LONG in the chair. Members present, 30.

After the minutes of the last meeting were read and approved, Dr. MARCEL HARTWIG showed a child nine years of age suffering from a neurosis. The muscles of the back were atrophied or undeveloped, those of the lower limbs, especially the calf of the leg, abnormally hard. Discussion of this case was postponed.

Dr. DEWITT SHERMAN read a report of a case of post chicken-pox nephritis. A child, four years old, on January 24, 1899, became ill with follicular tonsillitis; on January 31, 1899, with chicken-pox. The eruption was not abundant and the symptoms mild. On February 8th, the urine was noted dark, blood-stained and scanty, with some slight tenesmus. Urinary analysis showed abundance of albumin, 2.10 of 1 per cent., blood corpuscles, epithelial and blood casts, kidney cells and leucocytes. The child gradually recovered. During the illness there was no edema, no symptoms of uremia. Ergot, alum and gallic acid were given to check hemorrhage. A milk diet, orange juice and mild purgatives were amongst other measures.

Dr. Sherman reviewed the literature and noted that very few cases had been reported, those chiefly by German observers.

Dr. H. R. HOPKINS then read a paper on The Treatment of Scarletina, referring only to the hygienic conditions. For a number of years he has been in charge of the infectious wards of the Buffalo General Hospital and had arrived at some definite conclusions upon

this subject, especially the lack of precision in the treatment of scarlatina. Introducing the subject of the contagiousness of typhoid fever and tuberculosis he stated that definite hygienic measures had been laid down as to the general line of treatment. In regard to scarlatina, lazy, halting, antiquated measures still prevailed. Scarlatina in its early stages is not infectious or contagious. By common consent the desquamation stage is the most active infectious state, but we do not know how active, and have at present no means of estimating the degree or period of infection; in fact, we have no single evidence that the desquamated epithelial cells have a particle of infective character. Of practical value is the method of sterilising the hands and feet of patients, so they may return home several days earlier. Dr. Hopkins has been using a paste of Dr. Robert Weir, who employed it for the surgical disinfection of his hands. It is a mixture of chlorinated lime and washing soda made into a paste. Nascent chlorine is liberated and exerts a powerful sterilising effect. Before using Weir's paste the average duration of stay in Kimberly Cottage was thirty-four days. Since the institution of sterilising methods, the average is now twenty-four days, and he believed it possible in the future, that when the fever has subsided the case will be closed and we shall not have to prolong the treatment to get rid of the infectiousness. Bacteriologists should furnish information as to the infectiousness of the desquamated particles and place in our hands a technique, so that a child may be treated in its own home with safety to others.

Dr. IRVING M. SNOW then read a paper on Normal Saline Solution in Gastro-enteric Diseases of Children. After an historical survey of the subject, commencing in 1884 when Gaetano first used saline solution in the treatment of cholera to the present, the essayist discussed the preparation, strength and modes of administration of this substance. During the past three years it has been employed in hospitals and private practice by him. In the hospital at Athol Springs patients generally arrive weakened and depressed and an injection of saline solution is generally given on their entrance with good effects. There are generally two classes of cases: (1) Those with high temperature, vomiting and diarrhea; an acute infection without intestinal lesion. (2) Those with moderate fever, intolerance of food, six stools daily; an infection with intestinal lesions. In a large number of cases the amelioration was temporary. In certain forms no good was noted, while in a smaller number the serum was life-saving. Syncope and acute crises might be tided over.

In conclusion, saline solution was (1) a prompt stimulant; (2) a replacer of fluid; (3) should be used only as an adjuvant.

DISCUSSION.

Dr. CHARLES CARY in discussing Dr. Hopkins's paper added a protest to some municipal methods in vogue which add to the unpopularity of reporting cases: (1) as in a family living over a store, the latter suffers; (2) house visitation after an attack, when much expense had to be endured by orders for new plumbing.

Dr. A. L. BENEDICT spoke on the several papers and asked Dr. Sherman if a bacteriological examination had been made on the child's throat at the time he was ill with tonsilitis. In discussing Dr. Snow's paper he gave preference to bowel washes over injections.

Drs. Frost, Jack, of Depew, B. G. Long, also added to the discussion.

The trustees asked an opinion from this section as to the choice of rooms and Dr. Hurd moved, seconded by Dr. Benedict, that the sense of the meeting was to seek other quarters, preferably those offered by the trustees of the Catholic Institute. Meeting adjourned at 10.50 p.m.

MEDICAL SOCIETY OF THE COUNTY OF ERIE.

MEMORIAL MEETING.

REPORTED BY FRANKLIN C. GRAM, M. D., Secretary.

THE members of the Medical Society of the County of Erie, assembled in special session in the parlors of the Young Men's Christian Association of Buffalo, May 15, 1900, at 5 p.m., when the president, Dr. E. H. Ballou, announced the death of Dr. Louis P. Dayton, which occurred May 14, 1900, at the age of 80 years. He requested the society to take such action as it deemed appropriate.

On motion of Dr. Dambach, the chair appointed Drs. Howe, Slacer and Lothrop a committee to present a memorial. They submitted the following, which was adopted:

IN MEMORIAM.

The members of the Erie County Medical Society have heard with deep regret of the death of Dr. L. P. Dayton, and desire to place on record some tribute to his worth as a physician and a citizen. They recognise in him one who for many years occupied a prominent position in the profession and in the com-

munity. Not only was he skilled in his art, but his qualities of heart endeared him to his patients to an unusual degree. Moreover, he has left an excellent example of the physician's activity in municipal affairs and the value of such service. During the time that he occupied the position as mayor of the city he was earnest in fulfilling his duties conscientiously and thoroughly, and his interest in public hygiene at that time did much toward the establishment of the health department, which now reflects great credit on our city.

It is in recognition of these qualifications as a physician and as a man that we desire to pay this tribute—brief and imperfect though it be—to his name.

LUCIEN HOWE,
WM. H. SLACER,
THOMAS LOTHROP.

In speaking of the deceased, Dr. Wm. C. Phelps said that he had known Dr. Dayton for upwards of thirty years. Few members of the profession were better acquainted in the city or knew more people. The number of public offices he was called to fill was something phenomenal for a physician. In addition he took care of a large practice.

Drs. D. W. Harrington, Wm. H. Slacer, G. W. Pattison and J. J. Walsh also added brief, but eloquent tributes.

A telegram of condolence from Dr. Frederick F. Hoyer, of Tonawanda, was read by the secretary.

Adjournment followed.

Progress in Medical Science.

SURGERY.

CONDUCTED BY JOHN PARMENTER, M. D., Buffalo, N. Y..

Professor of anatomy and adjunct professor of clinical surgery, Buffalo University
Medical College.

AND

NELSON W. WILSON, M. D., Buffalo, N. Y.

Acting Assistant Surgeon United States Army.

THE GOOD OF THE POULTICE.

THERE has been so much general and popular misuse made of poultices where they were and were not indicated, irrespective of time, place or condition, that the old friend and standby has been brought into such general disrepute that if it is not wholly discarded its benefits, at least, have been lost sight of in many, many cases. S. E. Earp, writing on this subject in the *New York Med. Jour.*, says that the active principles of the poultice are moisture and heat and

hence it matters little what they consist of, except so far as their capability of retaining heat is concerned. They must be generous in size, applied hot, and frequently changed. In general it is better to use antiseptic fomentations upon open wounds, but the charcoal poultice is of considerable value as a deodorant in some cases of foul ulcer. The virtues of a poultice are seen in its power (1) to relieve congestion, (2) to promote absorption, favor resolution and hasten suppuration, (3) to diminish tension, (4) to soften incrustations, (5) to stimulate healthy granulations and (6) to perform the office of a deodorant.

LOCAL ANESTHESIA WITH EUCAINE B.

IN THE *Lancet*, A. E. Barker reports fifty-three cases, including radical cure of hernia, resection of intestine, gastro-enterostomy, goitre, wiring of patella, and the like, in which local anesthesia by means of 1 to 1000 eucaine B. in normal salt solution was used. For some patients as much as six ounces of this solution were used with no ill-effect. There is no interference with primary union. Children and timid adults are not adapted to its use, for they are frightened by the surgical surroundings. Acutely inflamed areas cannot be rendered entirely anesthetic. Dragging the mesentery causes a sense of pressure or griping.

LEGRAND'S SOLUTION ANESTHÉSIQUE-HÉMOSTATIQUE.

THIS solution can be sterilised and kept for a long time without in any way deteriorating. The method of using is the same as for Schleich's cocaine infiltration anesthesia. The special claim made for this solution is that there is an entire absence of secondary vasomotor dilatation following the primary contraction produced by the cocaine. The hemostatic agent is the gelatin. The formula is as follows:

R	Gelatin. pur.	20
	Sodii chloridi	0.7
	Acidi carbol. cryst.	0.1
	Eucaïn. hydrochlor. B.	0.7
	Cocain. hydrochlor.	0.3
	Aquæ distill ad	1000
M.		

THE USE OF SALT SOLUTION.

J. WESLEY BOVEE, writing of the use of decinormal salt solution says: "Ordinarily not more than one ounce per minute should be

injected into the tissues or vein. Pulmonary edema, dyspnea, headache, vertigo, mental excitement, delirium, hallucinations, severe pain in the left side, with engorgement of the liver and spleen, occur from overdistention of the bloodvessels with salt solution."

GUAIACOL AS AN ANESTHETIC.

LUCAS CHAMPIONNIÈRE says that guaiacol in solution in oil is used as a local anesthetic, especially for the turbinals and for the removal of polypi in the nose and ears. Anesthesia is obtained in ten minutes. Eucaine, which is less poisonous than cocaine, is used in a solution of 5 to 8 per cent.

TO THREAD A NEEDLE RELIGIOUSLY.

ONE of the most prolific causes of what might properly be called surgical profanity is the difficulties surrounding the threading of needles. Dr. Joseph M. Jackson has entered the missionary field and has pointed out the straight and narrow path to those whose patience has been tried and whose profanity has been lurid while engaged in threading a needle. Here's the anti-swear method: "To thread a needle hold it with the ring and little fingers of the left hand, instead of with the thumb and forefinger as is the usual way. This method leaves the thumb and forefinger free to grasp the smallest bit of silk or other suture material as it passes through the eye and pull it to a safe distance on the other side. This does away with the slipping back, so common in the old way of changing hands."

TO PRESERVE NEEDLES.

DAWBARN says keep them in a saturated solution of washing soda. Carbolic oils and watery solutions dull all cutting instruments, and in alcohol they will soon rust. Albolene has an unpleasant oiliness but is otherwise good. Calcium chloride in absolute alcohol is efficacious but expensive.

THE APPENDIX AND THE KNIFE.

DR. CARL BECK looks on all appendices as evils, and in summing up the whole question of operation says: "However light the clinical expression of appendicitis may be, and how much it may appear to be in favor of a speedy temporary recovery, the operation is always justifiable. As the strength of the infection can never be known with certainty from the beginning, it appears to be wiser to take each

appendicitis seriously. Among two evils the smaller should be chosen, and operation is the smaller evil."

TO EXTRACT FOREIGN BODIES FROM THE NOSE.

FELIZET makes a very comon-sense suggestion regarding the removal of foreign bodies from children's noses as follows : "Inject through the sound nostril a current of warm salt water at a moderate pressure, which, by returning by the posterior nares on the occluded side, forces the foreign body out, or at least allows of its being seized with forceps."

Abstracts.

EXPERIMENTAL DEMONSTRATION OF THE USE OF PEPTOMANGAN—GUDE.

WILLIAM KRAUSS, of Memphis, Tenn. (*Memphis Med. Monthly*), recently made experimental tests of various iron preparations, officinal and nonofficinal, before the Memphis Medical Society. The following account of the tests is of interest to the clinician. He says:

Beginning with the organic double salts, of which the scale salts are representatives, we notice upon the addition of this gastric juice, that a precipitate is formed; the double salt is decomposed and ferric salt remains, which is insoluble, both in gastric and intestinal juice.

The tincture of ferric chloride will precipitate some of the gastric constituents, though most of the iron will remain in solution in the hydrochloric acid; the iron still in solution will not be absorbed, because its nondiffusibility is taken advantage of in the manufacture of dialised iron, the acid passing through the animal membrane; when the iron finally reaches the intestine, the alkaline carbonates promptly precipitate it. Ferrous sulphate behaves similarly. In both instances, as you see, the very insoluble ferric oxides finally formed. If you have ever tried to remove iron stains from your water pitcher, you have some idea how insoluble it is.

The insoluble compounds, like reduced iron, or Vallets' mass, only serve to render inert the arsenic with which they are usually prescribed; if dissolved at all in the stomach, they are reprecipitated in the intestine.

Taking now Gude's preparation, we find it soluble, not only in all these reagents, but also in a mixture of them. Potassium ferrocyanide readily gives the iron reaction, excess of ammonia will separate it, redissolving the manganese, which is then recognised by the color of its sulphide, the alkaline copper solution gives the reaction for pepton, showing that it is what the label says. It mixes with arsenious acid, forming a perfect solution, thus giving us a most useful hematopoietic agent. The soluble alkaloids are perfectly soluble in it, as is also mercuric chloride. Being a pepton, it is readily diffusible by osmosis.

The only disturbing agent in the intestinal tract is hydrogen sulphide; this will precipitate it, but, presumably, much of the iron must have been absorbed before it encounters the gas; if not, appropriate agents should be used for its elimination.

Therapeutically, it does not nauseate, constipate, discolor the teeth, precipitate the digestive agents, nor become inert from contact with them. As to the clinical results, I need not add anything to the many reports already on record.

TREATMENT OF TUBERCULAR CYSTITIS.

RAMON GUITERAS (*Medical News*, April 7, 1900,) says:

Numerous remedies have been recommended by different authorities for the treatment of this form of cystitis, and naturally every practitioner who encounters this rebellious trouble grasps at anything that offers the probability of a cure. Guyon at one time advocated the use of intravesical injections of bichloride of mercury, 1 to 10,000 and since then many have been following his advice, but such a solution will rarely cure this disease, while it usually produces an irritation that is almost unbearable.

Nitrate of silver and permanganate of potassium have the same effect. Boric acid and boroglycerine irritate less, but do not seem to possess the power to ameliorate the disease. Recently iodoform injections have been advocated, and the procedure would seem to be founded on a logical basis. Three or four ounces of a 5 per cent. solution of iodoform in liquid vaseline are injected into the bladder every two or three days, the patient being instructed to watch the stream when he urinates and stop the flow just as soon as the oil appears. This forms a permanent iodoform dressing of the bladder wall, and in the hands of some of the French surgeons is said to have met with gratifying results.

Personally, I have had better results with borolyptol in this class of cases than with any other remedy which I have employed. This seems to have a powerful germicidal effect, while the fact that it does not irritate the bladder renders it pleasant to the patient. It is used in the strength of from 1 in 8 to 1 in 16 in irrigations by the hydrostatic method. After a few irrigations at the office, the patient will be able to use it every night at home. I have one patient now under observation who suffered for a number of years from a most aggravating frequency of urination accompanied by pain, dependent upon a tubercular cystitis. Under this treatment the urine has cleared up, the tubercle bacilli have disappeared and the patient can hold his urine from seven to nine hours at night and from four to six hours during the day.

Internally, in connection with any local treatment, an antispasmodic and an internal antiseptic should be used as a palliative measure; it is wonderful how much relief may be given to the patient by this means, even although pus remains in the urine and the tubercle bacilli still be found. One patient has been coming to me for three months who was entirely relieved of this disagreeable subjective symptom by a mixture containing ten minims of the tincture of belladonna, fifteen grains of benzoate of soda, and oil of gaultheria up to one drachm, t. i. d., although not until he was put on the borolyptol irrigation did the pus and tubercle bacilli in the urine diminish to any marked degree. The effect of the palliative internal medication is worthy of notice, in view of the fact that he had suffered for fourteen years, and had been under the care of many different physicians without relief, having most probably been overtreated by too much instrumentation and too frequent or too irritating irrigations.

A CHINESE FOUNDLING ASYLUM.

ONE of the greatest of Chinese wickednesses, and one which missionaries are constantly deploring, is child-murder. Foundlings are frequently left at the door of that magnificent Italian institution, commonly called the Girls' Orphanage, at Hankow. The institution now consists of five blocks of main buildings two stories high. The number of inmates is seldom less than 1,000, and up to the present time 94,650 taels (£12,000) have been spent on the grounds and buildings. The expenses amount to about 200,000 francs per annum, and this is contributed mainly by France and Italy. Females of all ages are admitted to the orphanage, from a baby to an old woman; though the

institute prefers to have them when they are young. The inmates come in many different ways, and for many different reasons. The babies are received much in the same way as in all foundling hospitals. Baskets filled with hay are placed on the veranda at the front door of the orphanage, and the mothers who bring the children deposit them in the baskets. There is always a Chinese watchwoman on the lookout for these waifs of humanity, and as soon as they are noticed they are taken in and attended to.

Notwithstanding all the attention bestowed upon them, the mortality among the foundlings is very high, and if 90 out of 100 live it is considered very good. Even after babyhood is past the foundlings require constant care and attention, and have to be treated with cod-liver oil and maltine until they are five or six years old. And this, of course, means that had they been left to the tender care of their Chinese mothers not one of them would have lived. It is a well-known fact that the parentage of female Chinese children who die is enormous. Girl-babies are not a desideratum in a Chinese household, so that when too many come along they are gotten rid of. Parents who are not devoid of all natural feelings bring their children to the orphanage and leave them there. On several occasions babies only one day old have been left in the baskets; and it is no great wonder that such frail morsels of humanity succumb to the effects of such unnatural treatment. There are no fewer than 500 nurses in the institution. All kinds of curious precautions are taken to prevent the babies from getting mixed up, each child having a special collar fastened around its neck.—*The Wide World*, London, May, 1900.

DIABETIC LARYNGITIS.

PATIENTS whose urine contains an appreciable amount of sugar, but whose general health has not yet suffered, will often consult the physician for a peculiar dryness of the throat and insufficiency of the voice after use. On examination the posterior pharyngeal wall is found to be dry, smooth, glistening and copper-colored, and the vocal cords have a peculiar shiny, glazed appearance. O. Leichtenstern (*Munch. med. Woch.*, April 17, 1900,) considers these signs as diagnostic of early diabetes. With proper dieting, the parts will return to the normal, showing that there merely is a hypersecretion without pathological change, although the latter may develop in the form of a sclerosis when the diabetes persists.—*Medical News*.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges should be addressed to the editor: 284 FRANKLIN STREET, BUFFALO, N. Y.

VOL. XXXIX.—LV.

JUNE, 1900.

No. 11.

A NEW MEDICAL ORGANISATION IN ERIE COUNTY.

THE incorporation of the New York State Medical Association by the legislature last winter, has had the effect of bringing the independent county organisations existing at the time under the power and dictation of the state association. Furthermore, the state association has sent out orders for the organisation of county associations where such have not existed heretofore. The creation of an Erie County Medical Association was demanded by the powers that be, and a meeting was held in the Y. M. C. A. hall for the purpose, May 21, 1900. Thus, another medical society is planned for this part of the state, already prolific and fertile in this respect.

The object of this new organisation, according to the statement of friends of the movement, is primarily to enable physicians to join the American Medical Association. This would seem to be an insufficient reason, as scores of practitioners have been received with open arms by the parent association since the state medical society took its advanced and manly stand on the code question in 1884. Some other motive is apparently behind this move, which most probably is to bolster up the state association in its warfare on the rights and privileges granted the Medical Society of the State of New York by past legislatures. The passage of the state examining board law in 1890 put the state on record as recognising all physicians graduating from a regularly incorporated medical college. When, therefore, this law was put in force, it changed the whole aspect of the code question in this state at least, and physicians qualified to practise medicine were equal before the law.

Physicians not identified with the state association or the state medical society have been able to join the American Medical Associa-

tion, and hence this excuse for organising separate county associations must fall. As far as the scientific work of county societies is concerned, the Medical Society of the County of Erie, likewise the county societies of Western New York, notably those of Chautauqua and Cattaraugus, have done excellent service and deserve the good will and patronage of all physicians irrespective of code or affiliation.

Besides the local city and county medical societies, public and private, Erie County is deeply interested in the Central New York Medical Association and the fourth district branch of the State Association. The attendance upon these societies already existing is not what it should be, and they lack in nearly all of them that spontaneity of interest and attention which go so far toward making a successful medical meeting. To further divide the small coterie of workers who have been active in the societies already existing, would be unwise and in our opinion prejudicial to the best interests of the profession. Would it not be better to concentrate all the strength and enthusiasm on the older societies and show that the profession can be united and strong in its organisation? If no need has existed for a county association to this late day, it is safe to infer that no pressing need is at hand just now.

A NEW MEDICAL LIBRARY BUILDING.

THE dedication of the new library building of the Medical Society of the County of Kings at 1313 Bedford Avenue, Brooklyn, N.Y., took place at 2 p.m., Saturday, May 19, 1900, under the following order of exercises:

In the chair, Lewis S. Pilcher, President Medical Society of the County of Kings; invocation, Rev. A. J. Lyman, D.D.; address, George M. Gould, Philadelphia, President of the Association of Medical Librarians; address, James R. Chadwick, Boston, Librarian, Boston Medical Library; address, Abraham Jacobi, New York, Chairman Board of Trustees, New York Academy of Medicine; Transferring of the Building to the Board of Trustees, William Maddren, Chairman of the Building Committee; Acceptance of the Building by the Trustees and Transferring the same to the Society, Frank E. West, Chairman of the Board of Trustees; Acceptance of the Building by the Society, Lewis S. Pilcher, President of the Society; Benediction, Rev. John P. Chidwick, U.S.N. A reception was given to the ladies from 5 to 6 p.m.

The JOURNAL is pleased to acknowledge the receipt of an invitation to attend, and regrets that it could not accept.

This society has done itself great credit in building a home and in establishing a library therein. It is an example that ought to be imitated in Buffalo and for the sake of stimulating such a movement we present a brief history of the Kings County Medical Society's building:

MOVEMENT BEGUN IN 1891.

The start toward getting the beautiful new home for the Medical Society of the County of Kings was made in 1891, when Dr. Joseph Hunt, the librarian of the society, said that the library "already demands more room." This library consists of more than 40,000 volumes, many of which are exceedingly valuable. The old, small and cramped quarters made it necessary to store a considerable number of these volumes. Following Dr. Hunt's report, the desire for more commodious and central quarters grew stronger each year. The society was not a rich one, however, and the thought of going into a scheme which would make necessary the expenditure of considerable money was to most of the members, who are at all times the busiest of men, a rather arduous proceeding.

The initiative was taken by Dr. McNaughton, when in his annual address as president in 1894, he emphasised the growing need and made the recommendation that some action be taken at once. A committee was appointed that was known as the "Jumbo Committee," to distinguish it from the minor committees, and it consisted of two members from each of the wards of the city, and two members from each of the county towns. It was organised in September of that year, with Dr. F. H. Stuart as treasurer and Dr. Myerle as secretary. Through the persistent efforts of this committee \$17,000 was raised in pledges.

The most serious problem next to the financial one, which had to be settled, was that of a site. After considerable discussion between those who desired a location in the neighborhood of Fulton Street and Flatbush Avenue and those who favored the Bedford district of the city, the latter element won, largely, it was said by its opponents, through the inability to find a suitable property at a reasonable price in the downtown neighborhood. In the spring of 1897, the president of the society, the chairman of the "Jumbo Committee" and the chairman of the Board of Trustees, recommended the site in Bedford Avenue, opposite the 23d Regiment Armory. This selection met the approval of the members of the society, as the extension of the Kings

County Elevated Railroad, and various other improvements in transportation throughout that district made it as convenient of access as any part of the city. The amount paid for the lot was \$17,500, one-half in cash.

THE CHOOSING OF THE PLANS.

A final building committee of five was appointed to consider thoroughly all the details, adopt plans for a structure and have general supervision of the work until its completion. It was composed of Drs. Frank E. West, George McNaughton, Wm. Maddren, Charles Jewett and William Browning, each representing some leading interest in the society. Frank Freeman was appointed consulting architect, and the plans of Wald & Cranford were chosen from twenty designs.

The building occupies a rectangle 59 by 85 feet. It is colonial in design, and executed in brick with stone trimmings. It is a three story and basement fire-proof structure, with special provisions for the safety of the library. In the basement a place has been reserved for bicycles, and the remaining space is devoted to a heating and ventilating apparatus and the elevator machinery. Coming into the building from Bedford Avenue, one steps into a vestibule in what is to be known as the main entrance hall. This is in the nature of a foyer for the auditorium, entrance to which is gained through three doorways. Around the foyer are a reception parlor, a women's room and a cloakroom.

At the right is the main office, the desk of which commands a view of all entrances. The auditorium will seat nearly 400, and is to be lighted chiefly from skylights extending across the building and over the speaker's platform. On the second story is the reading room, which occupies the entire front of the building. Here are to be fire-places, tables, current journal cases, card catalogue, cabinet for photographs and rare books. A feature of the library is the alcoves for private study. Adjacent to the reading room is a conversation room. The rear of the second floor is devoted to the stockroom, which has a capacity of about 100,000 volumes. Everything here is absolutely fireproof. The third story is devoted to the apartments for the librarian and custodian of the building, storage rooms and two large section rooms, which may be used separately or in conjunction.

In transferring the building to the Board of Trustees, Dr. William Maddren, chairman of the building committee, referred to the history of the procurement of the new building. For several years there had been an increasing realisation of the inadequacy of facilities for

library work. Most of the members remembered the pathetic piling up in cellars, closets and all over the floor of valuable books and precious material. This involved not only the impossibility of making a proper use of them, but also their rapid deterioration and destruction, as well as the continued risk of loss at the hands of collectors. This also dampened the ardor of any would-be givers.

Dr. Maddren continued as follows :

Most of those present can remember only too well the cramped meeting quarters in old Bridge Street home. The president had to suspend the session if a noisy vehicle passed along; the hygienic sense of the editor of *The Medical Journal* was outraged by the condition of the atmosphere when meetings of any size occurred; the oldest member was afraid his life might be shortened by the collapse of the building; the inhabitants of the house were frightened nearly out of their wits by the frequent creakings of the timbers at night. Finally, the city officials stepped in and put a stop to any further crowding of the building, and directed our beloved trustees to shore up the sinking walls. The outlook became more and more discouraging, and no one seemed able and inclined to come to the relief of our society—and by that is meant practically the whole profession of Kings county.

This society is indebted to its former president, Dr. George McNaughton, for the initiatory act in the procurement and erection of this building. The building committee also feels that his name should receive the place of honor for his enthusiasm, zeal and earnest effort in the realisation and adaptation of this building for the uses of this society. In 1894, at the April meeting of this society, the president, Dr. McNaughton, delivered an inaugural address, in which he dwelt upon the inadequacy and unfitness of our place of meeting and the need of a suitable and fireproof structure for our library. Prompt action was urged upon the society, and a committee was appointed to consider the recommendations of the president.

The total cost of our undertaking for building and site will reach early \$90,000, and we are assured at the present time it will cost a large increase on the amount paid to duplicate the building. To meet this outlay our funds have come from subscriptions, mostly from members, from the sale of our former property, and from the building loan. And at a time when our need of help was perhaps the greatest the wives and families of many members of the society organised themselves into a "Woman's Auxiliary to the Committee on New Building," and to raise money to help along our new building gave, at great expense of time and effort, the now famous and successful Græco-Roman Festival. The sum received from this source amounted to \$17,130.10, and the committee will ever bear in grateful remembrance the Woman's Auxiliary for this large and timely help.

THE ALUMNI BANQUET.

THE twenty-fifth annual dinner of the Alumni Association of the Medical Department of the University of Buffalo, was given at the Iroquois Hotel, Friday evening, April 27, 1900. Some account of the banquet was given in the May edition of this journal, but our space then was too limited to give all the details.

Two notable speeches were made on that occasion which are worthy of preservation in the records of the Association, hence we print them now. They are transcribed from the stenographer's notes and have not been revised by the authors; nevertheless, they are eloquent and interesting, and deserve to be read by every alumnus.

To the sentiment, Our Alma Mater, Dr. Charles G. Stockton, of Buffalo, responded as follows:

Mr. Toastmaster and Fellow Alumni: I modestly confess that I am a "professor." If I could profess to you as eloquently as Dr. Potter presides, what I have to say would sink deeply into your memories. However, you remember that the professor of whom he spoke merely professed; now, in the matter of speechmaking I do not go so far as that. This is an occasion, however, which stimulates my sluggish faculties; even a duller man than I would be stimulated on an evening like this, in such a company, at the end of the nineteenth century or beginning of the twentieth, or thereabouts, with the spirit that is flowing in this room—overflowing in some parts of it—with a presiding genius that would put good feeling and good cheer into any company, with distinguished guests to the right and to the left of me, certainly to the right, guests whom I have dreaded to follow, and whom I am afraid to precede.

I wish in the beginning to remind you of the fact that in speaking of the Alma Mater to which we cling with so much pride, we are doing no unnatural thing; of course, it is not an unnatural thing to give honor to such a source, but perhaps we do not realise how great an Alma Mater we have. In order to realise exactly what the university represents in its medical department, it is well to reflect upon the status of medical education in this country today, and to compare it with the status of the institutions which existed fifty years ago when this school first came into being. It is hard to realise that we have had only about a century of medical education in this country and that this school goes back somewhat into the earlier part of the century. It is a fact which we forget, that the University of Buffalo is but one of over 150 medical schools in the country; it is a fact which I think we lose sight of, that these schools have more than 4,000 teachers of medicine; that, as shown by the report of the commissioner of education at Washington, based on certificates of two years ago, that more than 5,000 physicians are graduated yearly; and that the property represented by medical schools at that

time aggregated about \$11,000,000. And it is a sorrowful fact that the endowment fund which all these schools represent, so far as their medical departments are concerned, including those of the great universities of the east and west, all put together, make a sum of less than \$2,000,000.

Now we of the University of Buffalo, without the support of a university in the fullest sense of the word, without the support of a community thoroughly given to educational matters, without the support of individual citizens who feel a strong impulse to advance scientific research, have felt at times a little lonely. But when we come to look over the statistics of these 150 schools and find that there is an endowment fund of only about \$2,000,000 for all of them, there is a chance to feel that we are not so far behind the great majority of the rank and file of medical schools after all. If we have not endowments we have something that goes a good deal further. If the school without endowments and without this sympathetic support in the community is able to secure the services of several experts in special chairs that require laboratory work, who give their undivided time to the prosecution of pure science, as these men do; if we are able to procure museums and laboratories, and the finest library connected with a medical institution in this country, if we are able to do these things without the support, we have that which is better than an endowment, which in time will bring endowments, a spirit in connection with our Alma Mater which makes things come; and by-and-by we shall look back with pride to the work which some men have done to hold this school to its present plane.

How has it been accomplished? Twenty-five years ago there were only seven professors connected with the school with a few instructors; when I was graduated there was only ten men in the teaching body, while now there are something like eighty, and there has been a marvelous change in the personnel of the staff and in the methods of teaching. There are a good many of you beginning to see why the University of Buffalo is succeeding, not because of the seven,—though they have done their part in bringing this about, how much, it behooves not one of the seven to say,—but because of the seventy men who, unpaid, are performing the more or less thankless task of devoting their time and best effort to the success of the medical department in spite of lack of sympathy from the community. It is this which guarantees the growth and success of the University of Buffalo, a growth which will bring to these men honor in time; for I believe that no man working there today, without salary or the prospect of it, will have done that work regretfully. It is that spirit which makes me hope for the University, and proud of our Alma Mater.

Across several tables from me there sit fifty young doctors of both sexes, whom I am very happy to congratulate and welcome into the ranks of medical practitioners, for which I would ask of them a certain amount of back pay. I believe they will give it. I am going to ask tonight of these fifty graduates a determination to give back to the

university such as their predecessors have given; not only that, but a resolution to be members of the Alumni Association *in fact*; a determination to give encouragement to the Association, and to the Alma Mater. It is easy to find reasons not to be active members to work for common ends. But I put it to you, if it is not better for each of us if we all put our shoulders to the wheel and push in one direction, that greater success shall come to the institution, and greater honor follow its name.

The speech of Dr. Stockton was punctuated frequently by applause and on taking his seat he was congratulated by those around him upon the forceful and eloquent manner in which he presented the claims of the university to the favor of the community, and especially to endowment. Let public-spirited citizens respond to his appeal!

To the sentiment, "The Ohio Idea," Dr. Charles A. L. Reed, of Cincinnati, who had delivered the commencement address, responded as follows:

Having engaged your attention already for a considerable time this evening, I feel that it is rather taking advantage of your kind indulgence to inflict myself upon you again, particularly with so commonplace subject as the "Ohio Idea." I say commonplace because it has become so common, you are so familiar with it that it requires no reiteration at my hands. In rising to respond to this toast, however, I purpose taking advantage of the opportunity to exemplify that idea by a certain modest diffidence always characteristic of the Ohio man. Then I want to mention the fact that the Ohio idea has a certain relationship to ceremonies like this, because we have had established over there coeducation in medicine for many years, as well as individual schools. I have great pleasure in stating to my colleagues of the profession that I enjoy the distinction, for I esteem it such, of having been the means of opening the first medical school in the State of Ohio for coeducation. I may say in addition that I was one of the first to close it for the same idea; but this was done in order to establish broader and better privileges in the incorporation of a school for women under circumstances of endowment.

The Ohio people are a peculiar people; they are people who come nearer typifying the great ultimate American composite than those of any other section of the country. Into that great territory migration occurred many years ago with the result that cavalier and puritan settled side by side; and it followed that sooner or later cavalier and puritan corpuscles went coursing merrily together. In that sense we began to realise the great American composite. These converging elements have produced a population that by virtue of its ancestral relationships is in touch with every section of the American continent; and as a result it is sending people with these comprehensive ideas

and sympathies over all these United States to broaden the more or less provincial conceptions of the older states. We have exemplified that by sending you here one of our brightest geniuses to develop your great enterprise—the Pan-American Exposition of 1901.

I feel a little reluctant to follow all these gentlemen who have been Chauncey-Depewing it all the way from the straits of Magellan to Baffin's Bay while we have been earning our bread in the sweat of our brows. I am here reminded that we are endeavoring to carry another Ohio idea into effect, and that is in reference to a very strong university organisation. Rapid changes are taking place in our more or less professional institutions which have existed heretofore, and everything is moving in the direction of strong university organisation with well appointed professional and academic departments, sustaining intimate and reciprocal relationships with each other under a strong central government. Now that Ohio idea is one which I should like to see carried out in other parts of the country. We who have had occasion to study the question very seriously feel the necessity for this step, and it is one of the things I expected to discuss in your alumni meeting this afternoon, but the promotion to be your evening orator deprived me of this privilege. I only drop this little hint and permit the thought to bear such fruit as it may in this fertile soil.

I wish to take advantage of this opportunity to emphasise somewhat remarks that have been made by Mr. Director-General Buchanan. I have long been profoundly convinced that the finest professional opportunities offered in the world today are presented in the Latin-American countries. With American enterprise and push and with the genius for a practical application so characteristic of the American mind, our countrymen who have gone there, if not our strongest men, perhaps the more adventurous, have achieved most conspicuous success. I accept in all sincerity what was stated banteringly, that by virtue of my correspondence with every Latin-American country I shall take great pleasure in endeavoring to give an applicant such credentials as shall render him *persona grata* to any such republics. In several cities of Mexico and Costa Rica, as well as in Quito, are now to be found American physicians who went there after the Pan-American Medical Congress, six years ago, having found little difficulty in acquiring the desired local status. This very idea of reciprocity which has been mentioned as a very important and practical question, is one which was brought into effective shape in Washington in 1893, when we appointed an international commission which has been, and is today, working in connection with the Montevideo Congress for the purpose of bringing about precisely that *entente cordiale* among the republics of this western hemisphere suggested by the Director-General. Now, Mr. President, it being a fact that there is a very large field down there which is very promising, and also a fact that competition is getting pretty stiff here, I wish you would bring your persuasive powers to bear on getting some of these young men into those promising fields. We are now supporting, and supporting liberally, a numerically larger proportion of doctors than

any other country in the world by 50 per cent. The per capita allotment of doctors is greater here than elsewhere by 50 per cent., and our sanitary condition is the best, while our death-rate is the lowest.

I am reminded of the very eloquent and forcible remarks made by the clerical gentleman, the Rev. Mr. Richards, who has just addressed you. I agree with everything he has said, and only allude to his address in order to emphasise a few of his adjectives. When he states that it is possible to establish in our patients a wholesome psychic attitude by calling or admitting to the sick room a clergyman, a sensible, tactful clergyman—those were the adjectives he used—I agree with him absolutely. And I agree that it is right to keep a fool out of there, whether he be a fool preacher or a fool doctor. And I hope my good friend will bring some missionary influence to bear in his profession so that we shall not have to study individuals to find out whether it is proper to admit them. We do not want any patent-medicine-almanac preachers in the sick room, nor those preachers who perpetually adorn the advertising pages of religious newspapers. When we have a wholesome, sound, sensible man, such as is the gentleman who as just addressed you, we feel safe, and find a helper in whom we are glad to extend the right hand of cordiality. I am not a Roman catholic, and do not care to make any invidious distinctions, but from the complete abstinence of the clergy of that denomination from all participation in the iniquity of nostrum endorsing, I have no hesitancy, when my patients ask for a priest, to admit him promptly. Therefore, I hope that influence will be brought to bear to place the whole clerical profession in such standing that we shall not have to make discriminations.

And now, Mr. President, permit me to thank you for the opportunity of again inflicting myself on this long-suffering audience, and to detain it just long enough to say how glad I have been to participate in these exercises.

MEDICAL DEPARTMENT GROSVENOR LIBRARY.

A VERY gratifying growth in the medical department of the Grosvenor Library is shown by the supplement to the catalogue of books in this department, recently published by the library. About 2,000 volumes and over 500 pamphlets were added during the year 1899, making a total January 1, 1900, of 5,316 volumes and 900 pamphlets.

This growth has been made possible by the liberality of the many friends of the library. The largest single donations were received from the New York Academy of Medicine and the University of Buffalo, but valuable accessions were also received from the libraries of a number of the physicians of Buffalo. A continuance of this

generous interest on the part of physicians will soon place within their reach a very efficient medical library, enabling them to do work here for which they have hitherto had no conveniences nearer than New York or Chicago.

Although this collection is comparatively small, a good start has been made, and as the collection increases it is hoped that it may attract larger donations and bequests, and eventually become one of the important medical libraries of the country. The Grosvenor Library has furnished pleasant quarters for this department of its work, and a thorough and complete catalogue of all materials placed in its hand and is endeavoring, in so far as its means will allow, to procure for its shelves the new books as they appear. Physicians and other students of medicine are invited to use this collection freely, and to take a personal interest in its growth and improvement. Mr. E. P. VanDuzee, the efficient librarian, informs us that any suggestions for the purchase of books needed for special study, or the better arrangement of the material already in its possession, will be gratefully received by him, and will be favorably considered whenever circumstances permit.

The trustees very wisely and generously fitted up special apartments for the medical branch of the library, where physicians may read, annotate, and search the books and pamphlets undisturbed by the other visitors, and where they will find every convenience for conducting their researches. Such a library is a credit to the city, and to the officials who conduct it. Physicians should make free use of the opportunities which it affords, and thus testify their appreciation of its advantages.

A BOARD OF EXAMINERS IN MIDWIFERY.

We quite agree with the subjoined editorial from the *Medical Record* of April 21st :

A bill has passed both Houses of the Legislature of this State, authorising the creation of a Board of Examiners in Midwifery in this city, composed of the assistant sanitary superintendents of the Board of Health. As representing the medical profession of the State, we have protested against the enactment of this measure, for the reasons, first, that the practice of midwifery, being a part of the practice of medicine, should be restricted to registered practitioners of medicine; the legalising of this practise by others will tend to perpetuate a system which we hope in time to succeed in having abolished; and second, if by any train of circumstances it should be considered advis-

able to legalise this practise by other than registered physicians, we believe any act of legislature with this object in view should apply to the whole state, and not be restricted to one city or county. We believe, if midwives are to be examined and licensed, the work of examining them should be placed in the hands of a State Board of Medical Examiners.

Happily this question will settle itself in favor of the medical profession, regardless of legal enactments, through supplantation of midwives by the physicians connected with obstetrical institutions.—*Obstetrics.*

ADMISSION TO THE PARIS EXPOSITION FOR MEMBERS OF THE MEDICAL CONGRESS.—Dr. H. B. Jacobs, secretary of the American National Committee of the Thirteenth International Medical Congress, informs us that during the week of the International Medical Congress, August 2d to 9th, free admission to the Paris Exposition will be granted to members of the Congress. To secure this, members will receive a special card by applying to the office of the Congress, 21 Rue de l'École de Médecine.—*Boston Med. and Surg. Jour.*

THE SECTION ON MATERIA MEDICA OF THE AMERICAN MEDICAL ASSOCIATION.—The troubles of the American Medical Association are perennial. For years the annual quarrel surged around the permanent secretary, and now, no sooner has the permanent secretary been unseated and removed from the scene of conflict, than clouds gather round the section on materia medica. The American drug manufacturers are alarmed by a report that the section is to be captured by members of the American Medical Association who are on the side of German chemical houses, and who will turn the work of the section into an advertising bureau for foreign drugs. The medical press is urged to raise its voice to thwart this nefarious scheme. But surely this alarm must be without foundation in fact. The American firms seem to have forgotten that every member of the American Medical Association is an avowed upholder of the code of ethics, and no one whose life is regulated by this moral law could descend so far as to bamboozle his fellows in this unprincipled manner.—*Med. Record.*

MEDICAL ASSOCIATION OF THE COUNTY OF NEW YORK NO LONGER INDEPENDENT.—At a special meeting held May 11th, the Medical Association of the County of New York voted away its independence

by adopting a resolution dictated by the council of the State Medical Association, by which it is constituted a subordinate county association of the State Association, and binds itself to obey the laws, rules and regulations of the latter.—*Boston Med. and Surg. Jour.*

PERSONAL.

DR. ROSWELL PARK, of Buffalo, was elected president of the American Surgical Association at its recent annual meeting held at Washington, D.C. Dr. Park, we are pleased to learn, is convalescing from his recent illness and is sojourning at Atlantic City, for a little time. Just as these pages are printing we learn that Dr. Park has been appointed Medical Director of the Pan-American Exposition.

DR. ELI H. LONG, of Buffalo, was elected one of the vice-presidents of the American Therapeutic Society, which was lately organised at Washington, D.C. The next meeting is called at Washington on May 7, 1901.

DR. MYRTLE A. HOAG announces her removal from 25 Wadsworth Street to 397 Dearborn Street, Buffalo. Office hours, 2.30 to 3.30 and 7 to 8 p.m.

DR. J. GLENN ERNEST, of Buffalo, has removed from 295 Goodyear Avenue to 115 Northampton Street. Hours: 8 to 9 a. m.; 1 to 3 and 7 p.m.

DR. GROSVENOR R. TROWBRIDGE, of Buffalo, has removed his offices from Ellicott Square to The Wellesley, cor. of Franklin and Edward Streets.

DR. HENRY NICHELL, of Buffalo, has removed from 80 Sycamore Street to No. 27 Day's Park.

OBITUARY.

DR. LEWIS P. DAYTON, former Mayor of Buffalo and for many years a leading physician of this city, died at his home on Bryant Street, on May 14, 1900, after an illness of eight years. Born in Eden, Erie

County, in 1819, he was graduated from the Springville Academy in 1840 and from the Medical College at Geneva in 1845, in which year he settled in Buffalo. From that time on he ranked as one of Buffalo's leading physicians. He was identified with many movements begun by the Medical Society of the County of Erie, and was



DR. LEWIS P. DAYTON.

From THE ILLUSTRATED BUFFALO EXPRESS.
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recognised as the dean of the fraternity which existed in Buffalo's early days.

In 1845, Dr. Dayton was elected school commissioner for the town of Black Rock. In 1849 he joined the Medical Society of the County of Erie, was elected vice-president in 1858; and served as president in 1859. During the years 1855, 1856, 1857, 1858, 1862,

1863 and 1864, he represented the old 12th Ward (now the 25th) in the Board of Aldermen. He was Member of Assembly from the Third District in 1865 and 1866, and was Mayor in 1874. He was twice County Clerk and served one term as County Treasurer.

DR. FESSENDEN NOTT OTIS, of New York, died at New Orleans, La., Thursday, May 24, 1900, aged 75 years.

Dr. Otis was born on May 6, 1825, in Ballston, N.Y. He was educated at Fairfield and Amsterdam, N.Y. He later studied medicine at the New York University and the New York Medical College. He was graduated from the latter institution in 1852. He was resident assistant physician at Blackwell's Island Hospital in 1852 and 1853. He then became surgeon to the United States Mail Steamship Company and remained with that company until 1860. In the following year he was appointed surgeon of the police department, and served in that capacity until 1872. From 1870 to 1872 he was president of the board of police surgeons and from 1869 to 1873 he was superintending surgeon to the Pacific Mail Steamship Company.

In 1862 he was appointed attending physician to the Demilt Dispensary, and continued as such until 1870. He later became surgeon to the Strangers' Hospital and president of its medical board. In 1862 he was chosen clinical lecturer at the College of Physicians and Surgeons, and nine years later became a clinical professor there. Since 1874 he had been consulting surgeon to various hospitals. In 1872 he was president of the American Dermatological Society. He was the inventor of a number of medical instruments, and was the author of several works on medicine and other subjects. The titles of some of his books are, Lessons in Drawing, Studies of Animals and Landscapes; Tropical Journeyings, and History of the Panama Railroad and its Commercial Connections.

DR. LANDON CARTER GRAY, of New York, died at his home, May 8, 1900, aged 50 years. The *Medical Record* says:

Dr. Gray early turned his attention to the study of diseases of the nervous system, and speedily won for himself an enviable reputation in that line of practice. While in Brooklyn he was professor of neurology at the Long Island College Hospital Medical School, and was visiting neurologist to St. Mary's Hospital. He was one of the founders of the New York Polyclinic, and was the first occupant of the chair of nervous and mental diseases in that institution. He was at various times president of the Medical Society of the County of

New York, the American Neurological Association, the New York Neurological Society and the Society of Medical Jurisprudence, and was for many years chairman of the executive committee of the Congress of American Physicians and Surgeons. He was the author of a work on nervous and mental diseases, and was at one time a frequent contributor to periodical literature in this specialty.

SOCIETY MEETINGS.

THE National Confederation of State Medical Examining and Licensing Boards will hold its tenth annual meeting in the banquet hall, Hotel Traymore, Atlantic City, N.J., Monday, June 4, 1900, under the presidency of Dr. J. N. McCormack, of Kentucky. The morning session will begin at 9.30 o'clock; the afternoon session at 2.30 o'clock.

The following program has been arranged: Invocation, Rev. Wm. Aikman, D.D., Atlantic City; Address of Welcome, Hon. F. P. Stoy, Mayor of Atlantic City; Address of welcome on behalf of the medical profession of Atlantic City, W. Blair Stewart; Address of welcome on behalf of the State Board of Medical Examiners, of New Jersey, Wm. Perry Watson, Newark; Response by Vice-president N. R. Coleman; Report of the Secretary-Treasurer; Annual address of the President—The work accomplished under the Kentucky law; Associate medical examining boards, Charles A. Groves, East Orange, N.J.; A brief review of the medical curriculum of the United States with special reference to its defects and indicated modifications, as demonstrated by the state medical examinations of Pennsylvania, Henry Beates, Jr., Philadelphia; The new medical law of Ohio, Hon. Maro J. Love, Bloomingville; The coöperation of the medical profession of the United States with the National Confederation of State Medical Examining and Licensing Boards in establishing interstate reciprocity for the license to practise medicine, Emil Amberg, Detroit, Mich.; Discussion: What steps shall be taken to establish a uniform standard of preliminary requirements in accordance with the recommendations contained in the report of the committee on minimum standards, adopted June 5, 1899? The following members will lead, N. R. Coleman, Columbus, Ohio; William Warren Potter, Buffalo, N.Y.; Augustus Korndoerfer, Philadelphia, Pa.; Joseph M. Mathews, Louisville, Ky.

Miscellaneous business; election of officers; adjournment.

THE following medical societies will hold their sessions in June, at Atlantic City, N. J.:

The American Academy of Medicine, June 2-4th.

The American Medical Association, June 5-8th.

Baltimore and Ohio Association of Railway Surgeons, June 1-2d.

American Medical Editors' Association, June 4th.

National Confederation of State Medical Examining Boards, June 4th.

Association of American Medical Colleges, June 4th.

American Association of Acting Assistant Surgeons, June 6th.

Medical Society of New Jersey, June 4th.

Confederation of State Boards of Health, June 1st-2d.

Railroad rates have been granted at a fare and a third, round trip, on the certificate plan, from all parts of the United States.

THE Buffalo Academy of Medicine held meetings during the month of May, 1900, as follows:

Section on Surgery.—Tuesday evening, May 1st. Program: Fitting glasses on children, Arthur G. Bennett; Abscess of lung, Edward M. Dooley. Discussion by Drs. Mynter, Parmenter, E. A. Smith, Phelps and others.

Section on Medicine.—Tuesday evening, May 8th. Program: Report of case of influenza with four distinct pneumonic attacks.—Otitis media purulenta marasmus, with recovery, Julius Ullman. Typhlitis and scolicitis, A. L. Benedict. Dress reform, Madame Mankell.

Section on Ophthalmology, Otology, Rhinology and Laryngology.—Monday, May 14, Program: Report of cases of incubation of the larynx, Eugene A. Smith; Some notes on trachoma, E. E. Blaauw.

Section on Pathology.—Tuesday evening, May 15th. Program: Echinococcus cysts of the pleura, Charles Cary. Discussion by Irving P. Lyon. Gaseous disinfection, Dr. Pease; Syphilis, illustrated by stereopticon, Grover W. Wende.

Section on Obstetrics.—Tuesday evening, May 22d. Program: Asepsis and anti-asepsis in obstetrics, D. W. Harrington; Obstetrical reminiscences, James S. Smith. Discussion of both papers by C. C. Wyckoff, Samuel G. Dorr, S. S. Greene, W. D. Greene and others.

THE Physicians' Club, of Buffalo, held its regular monthly meeting, May 16, 1900, at the home of Dr. J. J. Finerty, 429 Franklin Street. The paper of the evening, entitled, "Cancer," was read by Dr. C. E.

Congdon, which will be published in the JOURNAL. Dr. J. Henry Dowd reported some cases in practice, after which an election of officers were held which resulted as follows: President, W. G. Ring; vice-president, W. C. Callanan; secretary-treasurer, D. P. Doyle; council, J. J. Walsh, D. J. Constantine, T. B. Carpenter, F. M. Boyle and James S. Porter.

COLLEGE AND HOSPITAL NOTES.

THE 63d annual commencement exercises of the Medical College of Virginia, were held at the Academy of Music, Richmond, Thursday evening, May 10, 1900.

Dr. Christopher Tompkins, dean of the medical faculty, presided and conferred degrees upon 47 graduates. Of this number 40 received the degree of doctor of medicine, five, that of doctor of dental surgery, and two were graduates in pharmacy.

Dr. Charles A. L. Reed, of Cincinnati, O., delivered the address to the graduates. At the conclusion of the graduating exercises a banquet was given at the Jefferson Hotel, at which were assembled the graduating class, the board of visitors, the faculty, the alumni, and a number of invited guests.

The dinner was served in the style that has made the Jefferson famous. The toast-card was somewhat lengthy, but this was not true of any of the responses.

Dr. J. B. McCaw acted as toastmaster for a portion of the time, and then called Dr. George Ben Johnston to the chair.

The following were the toasts and speakers: Hon. Beverley T. Crump, "The Board of Visitors;" Dr. Robert F. Williams, "The Faculty;" Dr. D. J. Coleman, "The Alumni;" Dr. John E. Harris, "Graduating Class;" Hon. A. J. Montague, "The Doctor and the State;" Dr. Lewis S. McMurtry, Louisville, Ky., "Medical Education in the South;" Dr. William Warren Potter, Buffalo, N. Y., "The Surgeon in War."

At the conclusion of the responses to toasts Captain Frank Cunningham was introduced and sang the "Blue and the Gray" in a clear baritone voice, which proved a most appropriate conclusion to a delightful evening.

THE Buffalo Marine Hospital will soon be an accomplished fact if the signs at Washington are of any value in indicating results. The committee on inter-state and foreign commerce of which representa-

tive James S. Sherman is chairman, reported a bill to the House of Representatives on Monday, May 21, 1900, providing for the establishment of a Marine Hospital in Buffalo.

The bill was introduced early in the session by Hon. D. S. Alexander and provides for an expenditure for buildings and grounds of a sum not to exceed \$125,000. The necessity for such a hospital is beyond dispute, and it is to be hoped that no unnecessary delay will overtake the measure.

Book Reviews.

A CYCLOPEDIA OF PRACTICAL MEDICINE AND SURGERY. A Concise Reference Book, alphabetically arranged, of Medicine, Surgery, Obstetrics, Materia Medica, Therapeutics and the various specialties, with particular reference to diagnosis and treatment. Compiled under the editorial supervision of GEORGE M. GOULD, M. D., and WALTER L. PYLE, M. D. Philadelphia: P. Blakiston's Son & Co. 1900.

It is a great task to prepare a single volume that shall provide a cyclopedia of medicine and surgery. Moreover, it is one that has rarely been accomplished. The field is so large, the subjects are in great part so complex, and the difficulty of condensation without loss of substance is so great, that few men would dare undertake such a Herculean labor.

These editors, however, have accomplished the work they set themselves about in a most thorough manner; they have succeeded in incorporating in the book a vast number of short, pithy articles, all of which will prove useful, more useful oftentimes, perhaps, than the long discursive articles in the larger systems. It appears to have been one of the aims of the editors to give proper consideration to those slighter ailments which are so often overlooked in the textbooks, and a glance through its pages will show a large number of references that are not to be found elsewhere.

The book being a practical one, diagnosis and treatment have received particular attention. Many valuable formulæ have been included and a large amount of information presented in tabular form, all of which makes this volume a practical working book that will be constantly referred to in every-day practice. It is strongly bound in sheep and is handsomely printed.

CHIRURGIE DU FOIE ET DES VOIES BILIAIRES, par J. PANTALONI (de Marseille), avec 348 figures dans le texte. Octavo, pp. 626. Paris: Institute de Bibliographie Scientifique, 93 Boulevard Saint-Germain. 1899.

This excellent treatise is divided into four parts. The first is devoted to operations upon the liver proper; the second, to operations upon the ligaments, vessels, etc., of the liver; the third and fourth to operations upon the biliary passages and further subdivided into general and special biliary surgery. Each chapter is edited upon a

uniform plan in which is given in succession the history of the operation described, the technique of the various standard operations, the post-operative results and complications, and finally especial consideration of the question of the indications for operation in which the subject is discussed from the standpoint of the physician as well as the surgeon. The author hopes in this way to sufficiently arouse the interest and familiarise with results the practitioner who may thus be led to give his patients the benefit of early operative intervention.

The work is so replete, that to do it justice would require many pages. Even a cursory examination will convince the reader of its thoroughness and scientific value. It is a complete epitomé of hepatic and biliary surgery. The illustrations, 348 in number, have been carefully chosen, and are a striking feature of the book. In many instances the consecutive steps of an operation are so clearly depicted that a surgeon would have but little difficulty in performing an operation for the first time in an orderly and satisfactory manner. The value of the book is further enhanced by a comprehensive index of its contents, and of the illustrations. The author also makes use of the decimal classification of Dewey-Marcel-Boudouin, which permits the reader, when he wishes, to find the bibliography utilised by the author and to refer to the original works which he has availed himself of. This is supplemented at the end of the volume by the international ideological table and by comparing the numbers at the beginning of each chapter with this table the reader finds the references.

The book is an admirable one for all surgeons interested in hepatic and biliary surgery. J. P.

TRANSACTIONS OF THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION. Twenty-fifth Annual Session, held at Chicago, Ill., October 3, 4, 5 and 6, 1899. Volume I. Edited by HENRY E. TULEY, M. D., Secretary, Louisville, Ky. Octavo, pp. 474. Louisville, Ky.: The Courier-Journal Print. 1900.

This influential and important medical association takes a new departure this year in the publication of its proceedings. It met in Chicago, continued its sessions during four days, organised in two sections—medical and surgical—and listened to 47 papers, most of which were ably and amply discussed. It is most fitting that such work should be presented for inspection in book form. The Association has adopted this method of publication, and is to be congratulated thereupon.

Whatever may be said in favor of publishing such material journalistically, it will ever remain a fact that nothing is so satisfactory as a complete book with the whole proceedings open to inspection at a glance, in which, too, a particular group of subjects may be read easily at a short setting.

This volume is well arranged, handsomely printed and bound, and contains much valuable material. The publication committee consists of Dr. Henry E. Tuley, chairman; Dr. L. S. McMurtry and Dr. Dudley S. Reynolds. The book is edited by Dr. Tuley, and to say the work has been well done only feebly expresses a very apparent fact, which may be confirmed by even a cursory inspection.

TWENTIETH CENTURY PRACTICE. An International Encyclopedia of Modern Medical Science. By leading authorities of Europe and America. Edited by THOMAS L. STEDMAN, M. D., New York City. In twenty volumes. Volume XIX. "Malaria and Microorganisms." New York: William Wood & Co. 1900.

This volume consists of 828 octavo pages, 520 of which are devoted to the consideration of malaria, written by Ettore Marchiafava and Amico Bignami, of the University of Rome. This article was to have been prepared for publication over a year ago, but recent discoveries regarding the malaria parasite, made even while the authors were writing the paper, necessitated delay in order that the latest knowledge pertaining to the biology of malarial parasites outside the human body might be incorporated in its pages. There is so much incompleteness in the recent literature of the subject of malaria, even much of that which has appeared within a year or two being faulty, that it is a genuine pleasure to read this work. It is so exhaustive, so elaborate, so scholarly, and withal so satisfactory that we shall not be surprised to see it quoted by teachers as one of the best and most trustworthy authority.

The section on microorganisms is written by Simon Flexner, of the University of Pennsylvania. It, also, is a comprehensive treatise, beginning with a historical introductory, then giving, in consecutive progression, the classification of microorganisms, the metabolic products of bacterial growth, the technique of bacteriology, pathogenic bacteria, and closing with a list of bibliographic references. This is a period when every physician, no matter what his general or special line of practice, must be familiar with the general principles of bacteriology as well as with the essentials of microorganisms and their relations to medical and surgical diseases. In this monograph of 230 pages will be found just the information needed, properly classified and told in an interesting way.

The final section of the book treats of protozoa, the lowest division of the animal kingdom, and is written by Eugene L. Opie, of Johns Hopkins University. This is a most intelligent presentation of a subject that is rarely found in literature and most aptly complements the preceding sections. The text is preceded by eleven clear and handsome plates illustrating malaria, and the volume classes as one of the best of the series.

PROGRESSIVE MEDICINE. Volume I, 1900. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by HOBART AMORY HARE, M. D., Professor of Therapeutics and Materia Medica in Jefferson Medical College of Philadelphia. Octavo, handsomely bound in cloth, 404 pages, 36 engravings and a colored plate. Philadelphia and New York: Lea Brothers & Co. Issued quarterly. [Price, \$10.00 a year.]

This first volume of the second series of these books is presented on similar lines as were its predecessors. The same experienced editor is in charge and the list of contributors includes some of the ablest men in this country and Europe, carefully selected with reference to their fitness for the special work in hand.

The editor says, prefatorily, that every contributor has been asked

to say what he has to say in a narrative form and to place his hall-mark on the text, so that it will be a story which bears a personal imprint and will express not only the views of the author cited, but the opinion of the contributor as well. It takes experience and judgment to cull such material as is worthy of attention from the great mass of literature that is thrust upon the attention of the profession. How well the work has been done one must needs examine carefully the text of each article. When this has been done the verdict must, in our judgment, be one of approval.

The articles in this number are: The surgery of the head, neck and chest, by J. Chalmers Da Costa; Infectious diseases, including acute rheumatism, croupous pneumonia, and influenza, by Frederick A. Packard; Diseases of children, by Alexander D. Blackader; pathology, by Ludwig Hektoen; laryngology and rhinology, by A. Logan Turner; and otology, by Robert L. Randolph.

A comprehensive, well-digested index closes the book.

A TEXT-BOOK OF DISEASES OF WOMEN. By CHARLES B. PENROSE, M. D., Ph. D., Professor of Gynecology in the University of Pennsylvania; Surgeon to the Gynecean Hospital, Philadelphia. Octavo, pp. 531. Illustrated. Third edition, revised. Philadelphia: W. B. Saunders, 925 Walnut street. 1900.

Upon the first appearance of this text-book, now some three years ago, it was pronounced by teachers and practitioners of experience to be one of the best of the modern treatises on diseases of women. That it has stood the test of time and experience and fully justified this early opinion is amply vouched for by the fact that two editions have already become exhausted. The preparation of a third edition has enabled the author to carefully revise his work and to make such additions thereto as have become necessary through increased knowledge and improved methods in gynecology.

One of the striking features of the treatise is the fact that in a large measure it is a record of the author's personal experience. Another strong point of commendation is the fact that it was written especially for the student. This has enabled the author to speak in a direct manner without circumlocution or verbosity. We may cite as an example of the author's perspicuity his chapter on Fibroid tumors of the uterus. It is rare that we have seen so much information on this subject of the right sort condensed into so little space. Another excellent reason for commending the book is the superiority of its illustrations. These are, for the most part, original, clear and self-explanatory. They are especially strong in their delineation of injuries to the perineum and of displacements of the uterus.

CHRISTIAN SCIENCE. An Exposition of Mrs Eddy's Wonderful Discovery, Including its Legal Aspects. A Plea for Children and Other Helpless Sick. By WILLIAM A. PURRINGTON, Lecturer in the University and Bellevue Hospital Medical College, and in the New York College of Dentistry, upon Law in Relation to Medical Practice; one of the authors of *A System of Legal Medicine*. New York: E. B. Treat & Co. 1900.

This interesting book comes when called, and gives timely and reliable information upon an important and prominent topic. We con-

sider it good fortune that its author is neither a teacher of Christianity nor practitioner of medicine; being neither the one nor the other, but a student and teacher of law, he can the more appropriately defend Christianity and medicine against the common enemy.

Those of us who are willing to take impressions at second-hand—and many must do this from force of circumstances—will find in chapters I. and II. a fair and reliable illustration of what Eddyism claims to be, and also how far short of this claim the author finds its performance; these chapters are critical, do not assume to be sympathetic or friendly, but are fair and reliable.

We wish the author could have taken the time to write, as he is so well fitted to write, an admonition as to what the law may not do to the disciples of Eddyism. Our fathers thought by means of statutes, codes of ethics, by-laws and the like, to prevent our people from experimenting with homeopathy—with the result of making homeopathy live and flourish for a century. Undoubtedly the same or similarly unwise repressive treatment of Eddyism would be followed by the same uncalled for and confounding contribution to the growth and spread of the contagion. Warning and admonition against this treatment of error in religion or medical thought, would come with singular appropriateness from the legal profession.

H. R. H.

BOOKS RECEIVED.

A Pocket Text-Book of Chemistry and Physics. By Walton Martin, M. D., and William H. Rockwell, Jr., A. B., M. D., of the College of Physicians and Surgeons, New York. In one 12mo volume of 366 pages, with 137 illustrations. Just ready. Cloth, \$1.50, net. Flexible red leather, \$2.00, net. Philadelphia and New York: Lea Brothers & Co.

A Text-Book of Medical Treatment of Diseases and Symptoms. For the use of students and practitioners of medicine. By Nestor Tirard, M. D., F. R. C. P., Professor of Principles and Practice of Medicine, King's College, London. Adapted to the U. S. Pharmacopeia by E. Quin Thornton, M. D., of Jefferson Medical College, Philadelphia. In one 8vo volume of 624 pages. Just ready. Cloth, \$4.00, net. Philadelphia and New York: Lea Brothers & Co.

A Practical Treatise on the Sexual Disorders of the Male and Female. New (2d) edition. By Robert W. Taylor, M. D., Clinical Professor of Venereal Diseases in the College of Physicians and Surgeons, New York. In one handsome 8vo volume of 435 pages, with ninety-one illustrations and thirteen plates in colors and monochrome. Cloth, \$3.00, net. Philadelphia and New York: Lea Brothers & Co.

The Treatment of Fractures. By Charles Locke Scudder, M. D., Surgeon to the Massachusetts General Hospital, Out-Patient Department; Assistant in Clinical and Operative Surgery in the Harvard Medical School; assisted by Frederick J. Colton, M. D. Large 8vo, pp. 432, with 585 illustrations. Philadelphia: W. B. Saunders. 1900. [Price, \$4.50, net.]

Diseases of the Stomach, their Special Pathology, Diagnosis and Treatment, with sections on Anatomy, Physiology, Chemical and Microscopical examination of Stomach contents, Dietetics, Surgery of the Stomach, etc. By John C. Hemmeter, M. D., Professor in the Medical Department of the University of Maryland, Baltimore. With many original illustrations a number of which are in colors. Second edition, enlarged and revised. Octavo. 898 pages. Price, \$6.00 net, cloth. Philadelphia. P. Blakiston's Son & Co., 1012 Walnut Street. 1900.

Essentials of Surgery, arranged in the form of Questions and Answers. Prepared especially for Students of Medicine. By Edward Martin, A. M., M. D., Clinical Professor of Genito-urinary Diseases in the University of Pennsylvania. Illustrated. Seventh edition, revised and enlarged: Price, \$1.00 net. Philadelphia: W. B. Saunders. 1900.

Essentials of Diagnosis, arranged in the form of Questions and Answers. Prepared especially for students of medicine. By Solomon Solis-Cohen, M. D., Professor of Clinical Medicine and Therapeutics in the Philadelphia Polyclinic, etc., and Augustus A. Eshner, M. D., Professor of Clinical Medicine in the Philadelphia Polyclinic, etc. Illustrated. Second edition, revised and enlarged. Philadelphia: W. B. Saunders. 1900. [Price, \$1.00.

The Annual of Eclectic Medicine and Surgery. Edited by John V. Stevens, M. D. Volume VIII. Embracing the papers and proceedings of the various state eclectic medical societies for the years 1897 and 1898. Octavo, pp. 538. Cloth, price, \$2.00. Cincinnati, O.: The Scudder Brothers Co., Publishers. 1900.

Manuel Complet de Gynécologie Médicale et Chirurgicale. Par A. Lutaud, Professeur de Gynécologie, Médecin Adjoint de Saint Legare; etc., etc., etc. Nouvelle édition entièrement refondue. Contenant la technique opératoire complet, et 607 figures dans le texte. Paris: A. Maloine, Editeur, 23-25 rue de l'Ecole de Médecine. 1900.

Diseases of the Intestines. A Handbook for Practitioners and Students of Medicine. By Max Einhorn, M. D., Professor of Medicine at the New York Post-Graduate Medical School and Hospital, and Visiting Physician at the German Dispensary, New York. Small 8vo, pp. xiv.—391. New York: William Wood & Co. 1900.

ITEM.

MR. W. B. SAUNDERS, the well-known medical book publisher of Philadelphia, announces the final accomplishment of a step that he has long had in mind. Feeling that the growth of the business to its present large proportions has been due, not alone to his own exertions, but quite as much to the efficient coöperation of a number of his employees, he has decided to give recognition to such service by associating with himself in business, under the firm name of W. B. Saunders & Company, Mr. F. L. Hopkins, Manager of the Subscription Department and Mr. T. F. Dagney, Manager of the Publication Department. These gentlemen have been connected with the establishment almost from its inception, and to their capable management of their respective departments Mr. Saunders attributes much of the success that has attended his efforts.

Mr. Saunders believes that this action will strengthen the position of the house in the eyes of the medical profession, as it will secure a permanence of organisation that will ensure the perpetuation of the business. Besides this, it will obviate the disadvantages incident to a large business that rests entirely upon the shoulders of one person, by permanently attaching to the house those whose ability and experience have contributed in bringing the business to its present state of prosperity.

The subscription and publication departments will be conducted as heretofore. The trade book department will be under the management of Mr. W. D. Watson, whose connection with the house has extended over the past eight years, and who has demonstrated his ability to manage that department with efficiency and success.

BUFFALO MEDICAL JOURNAL.

VOL. XXXIX.—LV.

JULY, 1900.

No. 12.

Original Communications.

GYNECOLOGICAL MISTAKES AND THEIR PATHOLOGICAL BEARING AND IMPORTANCE.¹

By H. E. HAYD, M. D., Buffalo, N. Y.,

Gynecologist to the German Deaconess's Hospital.

IN THE consideration of the pathology of pelvic disease, it must be accepted that inflammatory affections of the endometrium, tubes, ovaries and peritoneum, are the result of the same pyogenic organisms as produce inflammations elsewhere, and just as we have mild and grave clinical manifestations in the cellular tissues of the extremities as the result of this coccic invasion, so we see different degrees and forms of pelvic trouble; the staphylococcus producing the milder forms of endometritis, salpingitis, ovaritis and peritonitis, while the streptococcus is responsible for the more virulent forms as well as the broad ligament phlegmons, ovarian abscess, purulent peritonitis and metastatic involvement of joints and distant organs. Besides those and perhaps other pyogenic bacteria, the gonococcus plays a most important rôle, and is perhaps responsible for as much, if not more, pelvic disease than all the other forms put together. Usually it does not exist alone, but in conjunction with the other pus-producing agencies, making a mixed infection and capable of causing the most serious complications the surgeon is ever called upon to encounter, imperiling not only the life of the patient, but destroying the function and usefulness of the organs involved.

These different cocci enter the cervix and occasion an acute endocervicitis, or they may remain there in a more or less latent fashion and come into pernicious activity by various traumatic or other agencies. The gonococcus travels by continuity of tissue to the endometrium and thence to the tubes and ovaries and peritoneum, while

1. Read before the Section on Pathology, Buffalo Academy of Medicine, April 18, 1900.

the other pus-producing bacteria, the staphylococcus and streptococcus, may also take the course of the lymph spaces and veins, directly to the peritoneum, and involve ovaries and tubes secondarily. Sometimes, although rarely, the intestinal tract is the source of the infection, by reason of the bacterium coli communi, which passes through the intestinal wall, and occasionally the gonococcus enters the peritoneum through the bladder or ureters and kidney.

However it must not be understood that all the diseases of the female generative tract are the result of bacterial invasion, as it is very probable that the catarrhal diseases of young girls and virgin women, with their associated creamy leucorrheas, are of purely hematogenous origin and are only made serious by reason of unnecessary examinations and local manipulations with sounds and intra-uterine applicators, converting a simple catarrh into a purulent inflammation. Nor can we accept in the light of recent pathology, cold feet, frights, emotions and disturbances of menstruation as a cause for pus in the pelvis, as these are but excuses for dirty finger nails, unclean surgical instruments and infidelity.

It would be extremely interesting for us to follow the pathological appearances of the organs involved in these diseased processes, but I purposely leave this study, feeling that a more practical and useful paper will result from the clinical application of these great undermining principles of the causes of pelvic disease. By this knowledge and a scientific respect for these deductions, we can at once see the dangers in connection with the therapeutics of the older school of practitioners, who believed and advocated that the uterine cavity could be invaded with sounds and syringes and various local treatments made without any special danger or harm.

However, with our new pathology, came increased wisdom and with it the greatest respect for the vulnerability of the endometrial mucous membrane, a knowledge which teaches us that although it may suffer all kinds of abuses without any serious reactions sometimes, yet sooner or later, the most serious consequences will result from the most trivial injury. The symptomatology of uterine disease is complex and many-sided, some of its symptoms are manifested in the organ itself, while others partake of the most diversified reflex phenomena. However, upon careful inquiry, certain prominent symptoms often suggest themselves, which point strongly to certain definite lesions, as for instance, the hemorrhage in fibroid tumor, the dysmenorrhea in endometrial affections of the cervix and body of the uterus, the reflex symptoms and often to most remote organs, from

displacements. The uterine syndroma of Pozzi, embraces certain general symptoms which accompany pelvic diseases and may be said to be pain, leucorrhea, dysmenorrhea, metrorrhagia, symptoms from neighboring organs, as the bladder and rectum, and from distant organs as the stomach and digestive tract, and the nervous system generally. Unfortunately many of these symptoms are present in other conditions than true uterine, tubal or ovarian disease and therefore their sources must be sought and if possible understood and carefully studied out.

Women, as a class, assume that most of their distress, pain and suffering originates in, or results from their genital organs, and look upon their sex as a providential curse. They are, therefore, always ready to believe, with but little encouragement, that some special disorder exists, and thus they become the victims of unnecessary and painful examinations and much needless local treatment, or as Price would say "gynecological tinkering." Pain in the ovarian region, dysmenorrhea, leucorrhea and backache are often but the expression of a poorly nourished body and an unbalanced nervous system, worn out by excessive cares and anxieties, and driven to exhaustion by unrequited affection and domestic infelicity. Medicine being an inexact science, commands many agencies potent for good and often fraught with harm, and these are placed into the hands of careless, unqualified and often unscrupulous medical men, and as a result, simple functional disorders are converted into gross lesions which only skilful and desperate surgical procedures can remedy. Pain is no doubt the most frequent symptom which we are called upon to treat, and is the one which most readily begets our sympathy, and should have our best professional thought. It is a symptom of so many varied conditions, and is so complex in its origin, being often most acute in purely functional disturbances, that it is frequently assumed to be the expression of some serious lesion, and as a result, many needless mutilating operations have been vainly tried for its relief. Lomer, of Hamburg, has beautifully studied this question, and has written two most valuable articles, which are to be found in the April and May (1899) numbers of the *Journal of Obstetrics and Gynecology*, and deserve your most careful study. Many women have been operated upon for the relief of pain, in whom gross painful lesions existed, and yet were not relieved of their pain by the operation, because there was also present, a reflex pain and tenderness, or a brain pain, which may have been due to the presence of the growth or the inflammatory exudate, or may have been independent

of them altogether. As a rule, however, a nervous or hysterical pain is acute, and is attended with marked and perhaps excessive superficial tenderness. It is in the skin and can be often increased by raising the skin into folds, and it is unduly disproportionate to the diseased organ. There are also present painful stigmata elsewhere and other well-marked hysterical manifestations, as the globus and the anesthetic conjunctiva and soft palate. It is needless for me to allude to the many operations which have been performed for the relief of pain, and how many querulous and mutilated women are going about from doctor to doctor, seeking relief for the many diverse and horrible symptoms which have resulted from an improper estimation and appreciation of this subtle but coy symptom, pain; suffice it to say, that these operations, which are more often performed by the unwary and the unguarded, are justly the opprobrium of our surgical art.

Endometritis and cervical catarrh is a very common affection with women, and is so easily influenced by conditions of the general health, that most women during their active menstrual life, suffer from them. They are the simple diseases of the uterus that we are so often called upon to prescribe for and they are the slighter ailments which men who hardly know the use of a speculum, institute active treatment against. Here the various caustics are applied, from the simple nitrate of silver solutions to the fuming nitric acid. Stenosis of the cervix and os interum and even cicatricial contraction of the canal, frequently results from these topical applications, as well as acute infectious endometritis with tubal and ovarian complications, often by lighting up latent gonococci and other pus-producing bacteria. Tonics, good food, change of air, active exercise, daily movement of the bowels, sexual rest and astringent injections are usually all that is called for. If the case, however, proves intractable and rebellious, a properly performed curettage and packing with iodoform gauze, is an infinitely less dangerous and far more effective means of treatment. However, if the cervix is wide and patulous and admits of free drainage, and there is no associated tubal or ovarian mischief, intrauterine applications of iodine or iodine and carbolic acid, with proper precautions, may be safely employed; but if the internal os is small and contracted, much pain and colic will result, and perhaps tubal complications. It is absurd to assume, except in the most exceptional cases, that a uterus can be properly curetted, without the assistance of an anesthetic, and that the operation can with safety be done in one's office and the patient be permitted to go home, as after an

ordinary intrauterine treatment. I am satisfied that great harm is done women every day by otherwise capable men, by underestimating the importance of this truly surgical procedure. It cannot be done well, and it will not be done thoroughly and cleanly, in a patient who is not anesthetised. Unfortunately, this splendid operation, capable of so much good when indicated, is performed quite unnecessarily, because mechanically it is so easily done. Here the merest tyro in medicine, in order to be in the swim with his successful rival and teacher, who is an acknowledged operator of ability, curettes, because he is not capable of doing the indicated Alexander operation, or an abdominal section. He persuades his poor, guileless and trusting patient that a curettage will make a speedy cure, and thus gets the credit of doing an operation. This experience, I have had time without number, and have taken out big pus tubes and ovaries in women, in whom one month before, a curettage was performed. The mechanical side of surgery is but a small matter and difficult technique is soon studied, but to be a diagnostician requires patience, study, practice and great skill, and without this ability to diagnose surgical conditions, surgery must be robbed of its glory and usefulness.

Salpingitis and ovaritis are often associated with the endometritis; in fact it is questionable whether an endometritis pure and simple exists alone, since the contiguity of similar mucous membranes, offers the route of an ascending inflammation which may be of a very mild degree in the tubes, and evidenced clinically only by slight tenderness without fullness in the vaginal fornices, but by the slightest provocation, may be accentuated so that the tube gets swollen, and its fimbriated end turns in and closes, when we get retention cysts, hydrosalpinx and pyosalpinx diseases which practically disorganise the future usefulness of the channel, or later pachysalpingitis with its sclerosing changes, making conservative surgery upon the tubes without hope. These are serious matters for the future well-being of woman, as well as the perpetuity of the race and nation.

Cervical lacerations with their associated erosions, or what are commonly called ulcers, are often shamefully treated by capable and representative men in our profession. They are painted with tincture of iodine and various caustic preparations week in and week out, and when the patient is tired out by these frequent applications without relief, she of her own volition, seeks a surgeon who quickly performs a trachelorrhaphy and restores her to a healthy and useful life; or from neglect to inform the poor woman of her future possibilities and dangers, these unhealthy ulcerated tears go on slowly but often

surely to malignant disease. Still unmindful and careless of our terrible responsibilities, this poor, trusting and confiding patient, who once had a simple and easily cured laceration, now has a cancerous ulceration, so far advanced and with infiltration so general into the broad ligament, that an operation, even if performed, is of questionable value. This gruesome picture looks like a creation of a vivid imagination, but yet these experiences, every one of us operating gynecologists have had, and these patients have been tamponned and painted with caustics inside of the womb and outside for weeks and months. It does not seem possible with the enlightenment of the nineteenth century, that such criminal ignorance and negligence could exist, but our operating rooms prove the truth and justice of my criticism. Neglected perineal lacerations, with their associated rectoceles and cystoceles, are treated by faradisation and alum injections and all kinds of tinkering and unscientific devices, until they become such serious matters that even well-directed plastic surgery cannot restore them to normal conditions.

Ureteritis, a quite common malady in women, is also carelessly interpreted, and its symptoms are treated as if they were of intra-uterine origin, and by the same routine procedures which characterised the average gynecological outfit—speculum, sound and intrauterine applicators.

Diseases of the rectum have such a varied symptomatology that they are frequently unsuspected. Fissure of the anus will produce the most distressing backache and reflex symptoms even to remote organs, and occasion such a degree of ill-health and nervous unbalance as to be responsible for the most violent forms of neuralgia and congestive dysmenorrhea. I dilated and curetted a young woman once without relief for marked congestive dysmenorrhea, and subsequently found an unsuspected fissure of the rectum, not so painful or irritable as to have produced pain at stool, but sufficient to have caused such an amount of nervous leak as to have undermined her whole system and reflexly to have congested her pelvic organs. Upon dilating the sphincter thoroughly, she was cured of her painful menstruation. Our officialists will maintain that her condition was due to a contracted sphincter, but be that as it may, her rectum was responsible for her pelvic mischief.

Nervous ovaries or Charcot's ovaries is also a very common condition, and is so often misunderstood and treated as though an organic affection existed. Pain in the ovarian regions and often excruciating tenderness in the iliac fossæ, with epigastric pain and

distress, and sometimes marked vomiting and dysmenorrhea are its principal symptoms; while upon vaginal examination, the uterus is found to be freely movable and the lateral sulci not thickened or indurated, but often excessively tender. Here the fine faradic coil is a specific, and as if by magic, the pain and tenderness disappear and sometimes only one or two seances are necessary.

The uterine sound, once so frequently used for diagnostic purposes, has been replaced by the educated finger and has justly been relegated to a very small field in the gynecological armamentarium. Yet it is a two-edged sword, and although sometimes a very valuable instrument, should only be used with the greatest care and with the strictest antiseptic precautions. The same might be said in reference to all intrauterine applicators, and to all kinds of intra-uterine manipulations.

It has been proven by frequent culture experiments that gonococci often remain latent for months and even years in the cervical canal and deep in the cervical mucous membrane, and are only brought into pernicious activity by the slight traumas produced by careless and unnecessary sounding and instrumentation of the uterus. In 100 consecutive women examined by Pryor, in twenty-four, the gonococcus was found, and perhaps was producing no trouble and only required the careless examination to be responsible for an acute infectious inflammation. The same clinical application can be made in reference to benign catarrhs which are insulted by the unclean sound or the contagiums of the vagina, which stick to it and thus more or less severe septic processes may follow.

The galvanic electrode has done more harm in the hands of the unskilful, than all the good which has been accomplished by its brilliant apostle, Apostoli, and his trained followers. And I regret to be compelled to say that so valuable an agent as electricity has been so easily placed in the hands of the unqualified and unscrupulous, that it is now being used by them, largely in our own city, under the guise of giving local treatments, for the purposes of criminal abortion.

The pessary, which is a troublesome and sometimes abominable device, under the most favorable circumstances, is yet a very useful instrument and capable in the hands of experienced men, of bringing great comfort and relief to suffering women. Every retrodisplacement, however does not produce definite symptoms, and perhaps does, only when there is present associated endometritis and catarrhal salpingitis. Nevertheless, it is too often the practice to insert this mechanical device where support is quite unnecessary, and when the

symptomatology is due to some other totally remote condition. The dangers associated with the wearing of pessaries, when neglected and not properly taken care of, are too familiar to you all to need any further comment from me. You have all seen the incrustations and the ulcerations of the vaginal wall, from its careless and neglected application, and have also known of metritis, tubal and ovarian diseases to result from their prolonged use. The last decade has placed in our hands, the Alexander operation, a unique and ideal surgical procedure, for the relief of symptom-producing uterine retrodisplacements. A simple, bloodless and easily performed operation, and I should say, practically without danger in careful and experienced hands. An operation which does away with the necessity of wearing a more or less dangerous, and at all times a nasty, and often stinking mechanical device, and one where the future child-bearing function is not in any way endangered or interfered with. It must be performed, however, only in suitable cases—in simple, uncomplicated posterior displacements.

The cry is—and a just one too—that there is altogether too much operating done nowadays; yet in the face of this just criticism I am compelled to believe that most of the symptom-producing definite and discoverable lesions of women, are cured best and quickest by operative measures, and our work in the past was often too incomplete to get perfect results, because surgical means were not pushed far enough to cure all the conditions which were present. Recent pathology has shown us, and clinical experience has demonstrated that often with marked retroversions, there is a general enteroptosis, an associated floating kidney, and a resulting chronic appendicitis. To place the uterus in position is but one element in relieving symptoms and distress, and without fixing the kidney and perhaps removing the appendix, a cure cannot possibly follow; therefore, incomplete surgery is responsible for these many failures, and not unnecessary and uncalled for surgery.

As we said before in our paper, the great difficulties in connection with our work is the uncertainty of diagnosis and the varied and complicated and unique expressions, which so many varied and different pathological phenomena can and will produce. The nervous symptoms of retroversions and posterior displacements are much like those of floating-kidney, and if both conditions exist in the same patient, operations for either one trouble, seldom relieve all the symptoms present, and no one can be satisfied beforehand whether both operations will not be necessary to complete a cure.

Thus, the clinical picture of disease in its entirety, must be carefully studied, and each individual element eliminated and given its proportionate consideration, and such remedial measures instituted, as scientific medicine, based upon a broad and enlightened pathology suggests.

493 DELAWARE AVENUE.

NOTES ON THE ADVANCEMENT OF THE OCULAR MUSCLES.¹

By BENJAMIN H. GROVE, M. D., Buffalo, N. Y.,

Surgeon to the Charity Eye, Ear and Throat Hospital.

THERE is now something of a fad of eye-muscle cutting. I thoroughly believe in the conservative practice of tenotomy of the ocular muscles yet the tendency is to go to the extreme. Everyone who desires to be conscientious in the matter, I mean by that, do *more* generally than just snip or button-hole the tendon and has had a large experience in operating can expect at times to over do his intentions. This requires the operator who makes tenotomies to be as equally able to catch up or advance a muscle. I have known those who do exclusive muscle work to over correct, and it has been the writer's experience to have caused homonymous diplopia when operating on the external rectus for an exophoria or turning of the eyes outward as well as in cases of convergence. Of course, such errors when noticed twenty-four to thirty-six hours after the tenotomy are easily corrected. However, there is no absolute method to be applied in the way of exact adjustment, so in many cases one must feel his way, as it were, and divide the operation between the eyes and, even then, make partial tenotomies more or less complete, depending upon the amount of heterophoria. This question is so complicated that many operators of experience hesitate about making tenotomies and the writer can testify that time has rather inclined him to be more cautious than formerly in this respect. Probably this applies more especially to the tenotomy of the internal rectus or recti for convergent squint. This is not the simple matter that in our college days we were taught to believe. Much can be done with atropine and properly adjusted glasses, especially in the case of children, and perfect adjustment by tenotomies alone should not be made before the patient is ten to fifteen years old. The writer remem-

1. Read before the Section on Ophthalmology, Otology, Rhinology and Laryngology, Buffalo Academy of Medicine, April 16, 1900.

bers the wordy conflicts carried on by Von Arlt and Stellwag, of Vienna, in regard to the age for operating. Von Arlt was inclined to operate at an early age and Stellwag used to tell us he had to patch up Von Arlt's cases in after years. The four recti muscles are as occasion requires advanced, but it is to the operation for the advancement of the internal rectus that I wish especially to call your attention. Such advancement is called for in three different groups of cases. First, depending upon an injury or an operation, as I said, causing divergent squint, depending upon such injury or an over correction for convergent squint. Second, it may be paralysis of the internal or external rectus or, in the third place, from loss of sight or greatly impaired vision in one eye, producing dissociation.

In the first and second condition the muscles retain a degree of contractility, while in the case of paralysis there is often none at all. My attention has been forcibly called to this operation by meeting half a dozen cases during the past four months. I present here a photograph of an interesting case which I operated on a short time ago; one taken before and the other three weeks after the operation. The result of this operation, as you will notice, is excellent. This patient was twenty-five years old. She was operated on by an oculist of good reputation in this city for convergent squint some years ago. Divergent squint resulted and three or four times under chloroform another operator apparently attempted advancement. When I saw her there was divergence of one-third of an inch and the left eye could not be turned in at all. I remember this operation formerly seemed to me somewhat of a bugaboo. In fact, I felt more confident in making an extraction for cataract than in promising a successful advancement. Special toothed forceps, among other instruments, have been designed, and the books speak of severe reactions following the operation, but neither of these conditions have I found necessary or likely to follow. Formerly I was accustomed to dissect the muscle and grasp it with this special forceps, always fearful that it would slip away, but now I advance the muscle together with the oculo-orbital fascia or capsule of Tenon. The essential steps or conditions of the operation which I have found most practical are:

First, a vertical stitch of black silk, number 4 to 6, passed close to the cornea, its middle third, on the nasal side, through conjunctiva and dipping into the sclerotic tissue. This stitch is tied and with needle is laid over forehead and cheek.

Second, with strong fixation forceps, with toothed ends grasping the conjunctiva and underlying tissue, about one-half inch from the

cornea on the nasal side, make a large vertical incision and then at each end a horizontal incision.

Third, make a complete tenotomy of the external rectus of the eyeball which you are manipulating, and if desirable of the other eye.

Fourth, now pass the needle of what we may call the corneal stitch from within outwards far back through mass of internal rectus muscle, capsule and conjunctiva. Then pass two stitches of white silk from without inwards through the same mass of tissue, one above and the other below, and pass the one above under the conjunctiva and into the scleral tissue, close to the upper border of the cornea and up to a line drawn vertically through the cornea. Then pass the other suture in the same manner below the cornea. Cut off redundant tissue and tie tightly, being sure to turn eyeball somewhat inwards.

Fifth, next fasten sutures through the stump of the detached external rectus or recti and asking patient to converge, strongly pass the sutures over the end of the nose and cover with plaster and collodion. Bandage both eyes securely and do not remove bandage for two or three days. Bathe eyelids and rebandage for two more days, but do not remove the stitches until five to seven days after the operation. The needles should be curved on the flat, and should have extra sharp points.

SOME THOUGHTS SUGGESTED BY THE LOCAL OR MEDICINAL TREATMENT OF CATARACT.¹

By B. H. GROVE, M. D., Buffalo, N. Y.

All natural sciences have progressed more or less through empiricism. Many of the accepted theories of one age appear to that which follows the rankest nonsense. This applies to the history of medicine as truly as to that of any other science. I remember in my college days in reading the history of medicine, nothing seemed to me more nauseating than the many abominable messes that were recommended and extolled by the profession of ancient times, for relief of various pathological conditions. For example, one of the more refined prescriptions was a pill made out of the skull of an executed criminal for the bite of a mad dog. The revival of organotherapy is interesting and shows how cycles of medicine like history

1. Read at Section of Ophthalmology, Otology, Rhinology and Laryngology, Buffalo Academy of Medicine, April 16, 1900.

repeat themselves. The ancient Egyptians appear to have placed much reliance upon the viscera of animals and the excrement of the gazelle as powerful remedies for certain diseased conditions of the eye, especially conjunctivitis.

Other forms of eye inflammation were relieved by the use of the human brain. Some portions of it were to be mixed with honey and rubbed on the eye at night and other portions were to be pulverised and used upon the eye in the morning. Blood of various animals was supposed to be very effective and edema or chemosis of the conjunctiva was speedily relieved by the milk of a nursing woman. This last mentioned remedy has been recommended to my actual knowledge even by some members of our local profession. However it is unnecessary to go back to the ancients; the last twenty years have sufficed to demonstrate the rise and fall of various queer methods of treatment, for example, I might mention, hydrogen sulphide by rectal injections for the cure of tuberculosis. This always seemed to me the acme of ridiculousness, and still I know there are members of the Academy who have testified to the cure of several cases by this method of treatment. I suppose today among the rubbish of some of the drug stores one might find the apparatus formerly used for this application of sulphuretted hydrogen. Along these lines it is interesting to read, *Currents and Counter Currents*, by Oliver Wendell Holmes.

We are not surprised, of course, when we read the startling testimonials of the laity. Recently one of the managers of a mineral water concern among whose stockholders are several physicians of good repute, told me he had received a testimonial from one of his patrons saying he was cured of an inguinal hernia by indulging freely in this peculiar liquid. Now it does seem that some physicians themselves are not without blame in this respect, judging from the various certificates that come to you and me in nearly every day's mail. A favorite expression of the fadist is "no one is so blind as he who will not see." It is, of course, axiomatic that if no one experimented nothing would be discovered and I am aware many of the best things in medicine have been discovered simply by accident. Still this does not mean that conclusions should be hastily and falsely drawn. What is necessary is true scientific methods; first, accurate diagnosis and, secondly, a thorough observation and a proper regard for coincidences. For about one year I, and doubtless many of you, have received literature from a certain St. Louis concern extolling the virtues of *succus cinerariæ maritimæ*, for numerous eye affections, including

the absorption of various forms of cataracts. This precious juice is dark in color and has a pungent taste and is doled out in vials, each holding about one drachm. The price is \$1.00 per vial, or twelve for \$9.00. At first I threw the circulars in the waste basket, but from time to time more were received. Finally, my curiosity was aroused, but my incredulity persisted. The circular announces, quoting from an exhaustive article in the *British Medical Journal*, how this juice has been employed with marvelous effects. That it is used by eminent physicians and ophthalmologists at home and abroad. That while its primary action is directed to capsular and lenticular cataracts many claim excellent results in other diseases of the eye. In iritis it overcomes inflammations, removes adhesions and causes rapid absorption of all exudates, etc.

One physician reports as follows :

My patient is steadily improving from the use of cineraria. Her case is a peculiar one. Cataracts have been forming in both eyes for ten years, but the lens have never become entirely hardened. She is being so much benefited by this remedy that it will not be necessary to operate, although several prominent physicians have advised this as the only means of relief.

While I considered the claims a swindle, still I wished to satisfy my curiosity, so I procured some of the drug and used it for three or four months in six cases, explaining to my patients at the time my disbelief in its merits. I tested my patients carefully, and demonstrated to my satisfaction the therapeutic value of the drug. During this time some general practitioners had asked me about this juice, and I was consulted by some patients in the city and vicinity who had been treated by their family physicians with this cineraria maritima. Notwithstanding this experience these notes would not have been written had I not read the following in such a reputable publication as the *Medical Record*, under date of January 27, 1900 :

Succus cineraria maritima is said to act in the absorption of cataract when dropped into the eye daily, two or three drops at a sitting. It is said that in many instances the results are "nothing short of miraculous."

It seemed that judging from my experience I should not allow this statement to pass unchallenged. Besides, my curiosity was aroused to learn if this drug was being employed, and if so to what degree by the profession generally. Accordingly, I sent out a few hundred cards and I learned that many physicians were interested in the subject and that not a few had made use of the drug. Many wanted to

know my opinion and were just about to send for the so-called magic fluid, but would wait to learn of my experience.

I am obliged to say therefore that after a fair and impartial trial I consider this drug without any merit whatsoever and simply one of the many delusions pure and simple. This opinion is also corroborated by the members of the Buffalo Ophthalmological Society, at least by all of those who have investigated the subject and by other oculists in this vicinity. To be sure, some of the physicians in general practice have returned me answers apparently in favor of the drug, but I imagine their diagnosis and examinations were not carefully made and that their patients were not afflicted with cataract. I surmise this because recently I have been consulted by a few who were being treated by cineraria for cataract because the pupil did not seem clear and black. Thorough examination, however, did not disclose a cataractous eye. Often a slight conjunctivitis, acute or otherwise, will cause an impairment of the eye-sight. The vision improves it may be with or without treatment and thus coincidentally the drug being used will get the credit. Although up to the present time treatment for cataract otherwise than operative has not attained any results, we must not deny the possibility that the time will come when it will become possible to arrest further development of a beginning cataract, or even clear up an opacity which has already developed. The cataractous lens is not to be looked upon as the result of excessive changes necessarily due to age, but rather the result of nutritive disturbances, chemical in nature.

From the earliest times not only have the most manifold suggestions been offered to bring about by medicinal treatment the disappearance of a beginning cloudiness of the lens in cases of partial and even total cataracts, but frequently those have come forward who claim good results from such efforts. But I will spare you from enumerating all those things which have been tried and reported worthy of a trial, for this would necessitate my beginning with honey and saffron, cooked in the bile of hyenas, and mentioning all the remedies down to dilute phosphoric acid, which fifteen or twenty years ago was praised in even scientific papers both in France and Germany as a universal remedy for grey cataract. I must not forget to refer to the method pursued by Dr. Kalish, of New York, some few years ago. The disappearance of incipient opacities has been at various times claimed to be effected by massage of the globe. He reported several cases and claimed to have attained some success, but the evidence is not convincing and the success has been very partial.

Massage is however a two-edged weapon, because in many cases instead of retarding the growth of cataract it has hastened it. The claims of galvanism likewise have no reliable foundation. I trust you have not been too much wearied with these rambling notes. In looking up this subject of the use of cineraria, I have at least the satisfaction of knowing that I have served some of my friends and have satisfied myself of the worthlessness of this drug for eye affections.

334 PEARL STREET.

METRORRHAGIA AND THE MENOPAUSE.¹

By WILLIAM WARREN POTTER, M. D., Buffalo, N. Y.

TWENTY-FIVE years ago this association held its first public meeting, perfected its organisation, and began its work. These exercises took place in the lower amphitheatre of the old college building, at the corner of Main and Virginia Streets. In the evening it was my privilege to deliver the first public address to the Alumni from the commencement stage in St. James Hall, which stood on a portion of the site of the Iroquois Hotel. It was then the custom to have two addresses at commencement—one to the graduates, and another to the alumni.

The next year I was chosen president of the association, and for several years was a member of the executive committee. Last year it was the pleasure of the association again to call me to the chair, and for all these indications of respect and confidence I beg you to accept my grateful thanks.

A few months ago while in attendance upon a meeting of one of our prominent national special societies I heard a paper read² which, with the discussion it evolved, made a deep impression upon me. Not because of its novelty, for it was not new; nor was it because of original thoughts developed in the discussion,—for they were not altogether original,—was I particularly impressed; but rather because of the way the subject was presented, and, further, because of the forceful manner of the discussion with reference to two or three points, did it so attract my attention as to determine the topic of the discourse to which I shall invite your attention for a few moments on this occasion.

1. Presidential address delivered at the twenty-fifth annual meeting of the Alumni Association of the Medical Department of the University of Buffalo, April 27, 1900.

2. Hemorrhage and the Menopause, John Milton Duff, Trans. Am. Ass'n Obs. and Gyn., 1899.

The most that I shall expect to do now will be to accentuate those features of the menopause that experience and observation have led me to regard as too important to be dealt with in a trivial manner. The general practitioner or family physician, as a rule, is consulted first by women who have some unusual symptoms developed during the approach of the climacteric. Too often are such patients told that they must expect almost any and every symptom that can be imagined during that mysterious period popularly termed the "change of life." So long as the symptoms can be classed as, strictly speaking, nervous phenomena, no harm may be done by tentative management; but if there be hemorrhages, excessive or recurrent, they may be regarded as of serious portent, and may require the closest diagnostic acumen to determine their cause. At all events, they are *prima facie* evidence of pathological changes that must be inquired into with all the skill that belongs to our art. It is at this time that the beginning of malignancy may be detected if investigation is thorough, and if found there must be no delay in adopting some radical measures of relief. Time was when such a patient was doomed at the outset, and abandoned to a fate more dreadful than death itself. Now, however, thanks to a progressive and enlightened surgery, if a proper and early operation is done a cure may be hoped for in a goodly number of cases, and relief from suffering or distressful conditions in the majority, with prolongation of life in nearly all.

It must be remembered, however, that hemorrhages are not always concomitants of malignant disease, neither is pain, which have always been associated in the minds of non-professional persons, especially when persistent, as indications of cancer. These two symptoms, hemorrhage and pain, have, indeed, even in the estimation of physicians, been regarded as classic symptoms of malignant disease, but cancer has been known to progress even to advanced stages without decided hemorrhage or pain—an exception to the general rule, that must not be overlooked and a favorable diagnosis reached, based upon the absence of these two important signs.

There are other diseases of the genital tract, non-malignant, that may exist with hemorrhage as a prominent symptom. We may recall, for example, that a history of hemorrhage has been associated with the presence of fibroma, uterine cysts, disease of the appendages, and of the endometrium, all of which may occur in women between forty and fifty years of age, be strongly suspicious of malignancy, and yet be absolutely benign in character. So, I observe, that it will not answer to make hasty interpretation of symptoms singly or in groups,

but only after duly weighing all phenomena, historic, physical—subjective and objective—can a fixed and definite conclusion be reached as to the proper interpretation to be placed upon hemorrhages at or near the menopause.

In view of all this—and much more might be said in elaboration of this part of the subject—it is safe to assume that every persistent and recurrent hemorrhage occurring in a woman during the fifth decade of life, shall be regarded with suspicion. It is indicative of some important pathologic change; it should receive the most considerate attention by a physician who may be consulted, and he should not stop short of a careful physical examination of a patient so complaining. Such an one should be duly and seriously informed of the significance of such a symptom, and she should submit herself to the most considerate investigation at skilful hands. On the other hand, when a physician is consulted by such a patient he must not regard his responsibility lightly. He must not say that such and such symptoms are to be expected at this time of life, and that they mean very little or nothing. He must not convey the impression to a woman approaching the climacteric with unusual symptoms, that she is unnecessarily concerned about herself, until he is satisfied that such is the fact, after he has most patiently weighed every possible piece of evidence that can be obtained. This means the most thorough examination of the genital tract that modern gynecology can offer, an examination supported if need be by the microscope, or any other accessory that may help to arrive at the truth. It means, too, if malignant disease of the uterus be detected, an immediate hysterectomy, total, complete, absolute—to be done now. Delays here are as dangerous to life as in fulminating appendicitis, and every person, professional and lay, knows that procrastination in such a condition is not to be brooked on any account.

If operation is promptly made in early cases success is almost assured, provided the uterus and appendages are removed. We could not speak as confidently when curettage of the diseased cervix in carcinoma was an accepted plan of procedure. Then it was not easy to remove all invaded structures, some nodules were almost sure to be left behind, and these formed a nidus for a new development of the disease, which almost always then spread rapidly to a fatal issue. Now, with the improved surgery, whereby all infected organs may be removed under perfected technique and asepticism, operation may be more confidently advised,—even insisted upon under favorable conditions. I do not wish to be understood as saying that excision

always will cure even in well selected cases, for so much, after all, depends upon systemic states, resisting power, and what may be termed general surgical fortitude in this as well as in most other high-class surgery; but I do affirm that under the favoring conditions of early diagnosis, prompt and complete surgery, localised infection, and good resisting power, many women are cured, who heretofore were lost; many more have their lives considerably prolonged; and still others are relieved of great mental and physical anguish. Taken altogether, then, there has been great improvement in methods of dealing with malignant disease of the uterus during the past twenty years. When this association was organised twenty-five years ago there was little that was encouraging to be said to a woman who presented the evidences of carcinoma of the genital tract. Our methods of recognising the disease in its early stages were less determined, and our methods of operating were far below the present standard.

One of the greatest difficulties we have to contend with in this country is to get patients to pay sufficient heed to their early symptoms. There is a tradition among the people that the climacteric is naturally fraught with perturbation of body as well as spirit, hence many times such patients do not consult physicians for symptoms that need intelligent interpretation. It is said that in some parts of continental Europe, perhaps in Austria and Germany, cancer of the uterus is more successfully dealt with than here, not because there is more professional skill exercised, but in those countries women beset the clinics early, hence receive prompter attention, and remain longer under observation. In America there is less of that spirit prevalent, less opportunity, perhaps, to invoke efficient aid in early manifestations of the disease, and, it may be, more indifference on the part of the great body of the profession toward the hemorrhages of the anteclimacteric period.

In the course of the discussion of this subject, to which I made allusion at the outset of my remarks, it was stated that the general practitioners of medicine who usually meet these patients first were more or less responsible for the delay they experience. It was affirmed that the general practitioner was not always alive to the importance of the situation, that he often regarded hemorrhages as incident to the "change of life," and led his patients to so believe, until finally, when the real condition became apparent it was too late for surgical relief, because the halcyon days were past. Without affirming or denying the statement, I present it for consideration at this time.

We are gathered here today as general practitioners, we mingle as such for the day, no matter what our several specialties in practice may be. The specialist who is not competent to give advice as a general practitioner, is not deserving the confidence of the public as a specialist. To a great extent the converse of this proposition is true.

Again, for the day we are all young men—pardon my pride and modesty in so rating myself—we are for the time being of the class of 1900, and must be permitted to counsel together as such. We are the boys and girls of the U. of B., we revel in our youthfulness, and in the progressive work of our alma mater, who, though 55, is as robust and vigorous as her youngest brood.

Let us then consider whether we, or any of us, are in error in the view we take of this grave subject, and in the advice we give to these who suffer from hemorrhages at or near the menopause.

I blame myself for having made such mistakes in my early years of practice, but none of the men of 1900 can be forgiven if they commit such grievous blunders.

You have been taught as students to regard such symptoms as serious and to so impress your patients. So, too, have your predecessors for fifteen or twenty years. My object in introducing the subject is to accentuate the importance of the teachings you have received regarding it, and to urge you to heed them to the very letter. It is one of the most important duties you can perform to your patients, and you cannot escape censure if it is neglected or performed with indifference.

It is the duty of every alumnus of this college who has graduated within the last twenty-five years to constantly and habitually attend the meetings of his local medical society, and yield the weight of his or her influence in discussing this subject on proper occasions, until there is aroused a sentiment that will serve to change the impression among the laity, that the "change of life" is a time when women must expect hemorrhages. The fact is, that the menopause means the very reverse; it is a time when the physiological flow must cease, and it must not be replaced by a pathological flow if a woman is to be called healthy, or if she is to be told that there is no occasion for anxiety.

These, I am aware, are only generalities. I leave the particulars to be supplied by those who may take part in a free discussion of the subject which I now most cordially invite.

TAKING INVENTORY OF A NERVOUS CASE; AND THE EFFECTS OF SEASON UPON THE PRO- DUCTION OF NERVOUS DISEASES.¹

By WILLIAM C. KRAUSS, M. D., Buffalo, N. Y.,

Consulting neurologist, Buffalo General Hospital; attending neurologist, Erie County Hospital,
German Hospital, German Deaconess's Home, and Woman's Hospital.

DISEASES of the nervous system are indicated by symptoms, objective as well as subjective, which require at times more than the ordinary skill and ability on the part of the physician to be correctly diagnosticated. The minor symptoms are generally so obscure and complex that some plan or procedure is necessary to detect their presence and to correctly interpret their value and significance. A system which will classify the minor phenomena of the subjective and objective major symptoms, will also go far toward unmasking many nervous diseases and render their diagnosis easier and more clearly to the student and practitioner.

The purpose of this paper is to present just such a system, and if followed out cannot fail to accomplish the purpose for which it was intended.

A successful business man has a system in taking inventory of his stock and when completed he is in no doubt as to his financial condition. A physician who employs a like method in inventorying a nervous patient arrives at the same satisfactory result and can proceed in the treatment of his patient in a thoroughly rational and scientific manner.

Anamnesis:

1. Date or season.
2. Name.
3. Sex.
4. Age.
5. Nativity or nationality.
6. Occupation.
7. Family history { Direct.
Collateral.
8. Early History { Environment.
Development.
Habits.
Characteristics.
Infantile Diseases, in-
cluding injuries.

9. Present History { Cause.
Onset.
Progress.
Complication.

Status Presens:

1. Height.
2. Weight.
3. Expansion.
4. Constitution and habitus.
5. Complexion.
6. Stature.
7. Gait.
8. Posture.
9. Head { Skull.
Scalp.

¹. Read at the thirty-second annual meeting of the Medical Association of Central New York, at Syracuse, October 17, 1899.

10. Face	{	Symmetry or asymmetry.		11. Neck	{	Size.
		Tics and Squints.		Motility.		
		Facial angle.		12. Body and Extremities	{	Tremor.
		Degenerative stigmata.				Spasm.
		Expression or facies.				Muscular atrophy.
		Skin and appendages.				Tendon reflexes.
		Color.				Paralyses.
		Vaso-motor disturbances.		13. Pulse.		Sensation.
		Painful points.		14. Temperature.		
		Special Sense organs.		{	Eyes.	
Ears.	17. Stomach contents.					
Nose.	18. Feces.					
Mouth.	19. Mentality.					
Speech.		20. Coma.				

SEASON.

The effect of season upon the production of nervous disorders is well recognised and has been the subject of much inquiry and investigation. Not only do the changing seasons encourage and nurture nerve disturbances, but the changing barometric pressure exerts its influence also. "Living barometers," or those individuals who can feel the storm several days a coming, are met with in every community and their sensitive nervous organisations rise and fall synchronously with the mercury in the tube of the household barometer.

Mitchell and Catlin have studied the influence of weather upon neuralgic disturbances, and less than half of the cases studied felt unusual sensations upon the coming of an east wind and during its continuance; and of these, two-thirds insisted on their power to predict such change in the weather, while the rest thought that any great change was likely to cause them great pain. An annual neuralgic curve was constructed on the monthly ordinates of neuralgic duration, and a large number of neuralgic attacks were seen to be definitely related to storms, and Mitchell believed that some combination of weather started the pain. At the center of the vast rain area of every storm is a moving space of the greatest barometric depression, known as the storm center, which the rain usually precedes by five hundred to six hundred miles, and before and around the rain is a forerunning neuralgic belt (Mills).

In those seasons where both the thermometer and barometer are low and subject to frequent and rapid changes, as during the winter and spring months, there will be found those affections of an acute

inflammatory nature, commonly designated as rheumatic or à frigore. These may affect the sensory nerves, resulting in neuritis the trophic nerves, as in Raynaud's disease, the motor nerve, as in Bell's palsy, and the brain and spinal cord, as in meningitis and acute myelitis. Many of the organic, chronic diseases make their initial appearance during these seasons of varying temperature as, muscular atrophy, locomotor ataxia and paralysis agitans. Certain functional disturbances, especially chorea, hysteria and neurasthenia, are found to occur more frequently in the late spring and early summer months, probably due to seasonable changes and a resulting lowered tone of the central nervous system. The system seems to be at low ebb during these months and exhaustive nervous conditions result.

During the summer and fall months the infectious processes seem to be more prevalent, and are represented by such affections as tetanus, acute anterior poliomyelitis and beriberi. The exhaustive neuroses, especially neurasthenia, are also common, the intense heat and humidity of the summer months being enervative to a marked degree.

Some of the nervous diseases more or less susceptible to seasonal influences are arranged alphabetically, giving the months of greatest occurrence. A classification of these diseases, according to the season, then follow: angioneurotic edema, winter months; apoplexy, cerebral, winter months; Bell's palsy, November, December, January, February and June and July; beriberi, summer months; chorea, March, April, May, June; erythromelalgia, summer months; epilepsy, all seasons; laryngismus stridulus, winter and spring months; locomotor ataxia, winter months; meningitis, epidemic cerebro-spinal, winter and spring months, seldom autumn, never summer; meningitis, tuberculous, winter and spring months; migraine, winter months; muscular atrophy (Duchenne-Aran), winter and spring months; myelitis, acute, winter months; myxedema, winter months; neuralgias, late autumn and winter months; neurasthenia, spring and summer months; neuritis, spring and late autumn; paralysis agitans, spring and winter months; poliomyelitis, acute anterior, summer months; Raynaud's disease, winter months; tetanus, August, especially July to October; tetany, January to May.

Spring	{	Bell's Palsy.	Winter	{	Angioneurotic edema.
		Chorea.			Apoplexy, cerebral.
		Hysteria.			Laryngismus stridulus.
		Locomotor Ataxia.			Locomotor ataxia.
		Meningitis, epidemic cerebro-spinal.			Meningitis, epidemic cerebro-spinal.
		Meningitis, tuberculous.			Meningitis, tuberculous.
		Muscular atrophy (Duchenne-Aran).			Migraine.
		Neuralgia, infacial.			Myelitis, acute.
		Neurasthenia.			Myxedema.
		Paralysis agitans.			Neuralgias.
Summer and Autumn	{	Tetany.		{	Intercostal.
		Bell's Palsy.			Sciatic.
		Beriberi.			Infacial.
		Erythromelalgia.			Neuritis.
		Neurasthenia.			Raynaud's disease.
	{	Poliomyelitis, acute anterior.		{	
		Tetanus.			

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Society Proceedings.

BUFFALO ACADEMY OF MEDICINE.

REPORTED BY THOMAS F. DWYER, M. D., Secretary.

ANUAL meeting held at the Academy rooms, Public Library Building, Tuesday, June 12, 1900. The meeting was called to order at 9 p.m. by the president, Dr. MATTHEW D. MANN. The minutes of the last annual meeting were read and approved. The secretary of the Academy and council presented the following report, which, on motion, was received and ordered spread on the minutes.

ANNUAL REPORT OF THE SECRETARY.

To the Academy of Medicine:

During the past fiscal year eleven applications for membership have been received and favorably acted upon, of which nine were resident Fellows and two non-resident Fellows. Thirteen members have been dropped for nonpayment of dues and three resignations have been received and accepted during the year. Two members who had been dropped for nonpayment of dues were readmitted to membership. I am pleased to be able to again report that the membership of the Academy has not been decreased by death since the last annual meeting. The program for the session 1899-1900, together

with a list of Fellows in good standing was printed and a copy sent to each member.

On December 5, 1899, a new section was added to the Academy, the Section of Ophthalmology, Otology, Rhinology and Laryngology.

The Academy parlors in the Palace Arcade, so long occupied by the Academy, were vacated May 1, 1900, and the rooms of the Buffalo Society of Natural Sciences, Public Library Building, have been leased for the present year. Four regular meetings were held and entertained in turn by the sections of the Academy: Section of Obstetrics and Gynecology, June 27, 1899, at which Dr. Wm. P. Spratling, Craig Colony, Sonyea, N. Y., was to have read a paper, but telegraphed at a late hour that it would be impossible for him to be present. Section of Medicine, September 12, 1899, The medical aspects of crime, Dr. Daniel R. Brower, Chicago, Ill. Section of Surgery, December 5, 1899, The value of normal salt solution in surgery, Dr. Chauncey P. Smith; Hypertrophy of the prostate, Dr. Charles F. Durand; Desiccated suprarenal capsule in acute coryza, Dr. Frederick H. Millener. Section of Pathology, March 20, 1900, The present status of recent investigations on cancer, Dr. H. R. Gaylord.

The meetings of the Academy have been attended as follows: at the June meeting 20 were present; September meeting, 61; December meeting, 21; and the March meeting, 67, an average attendance of 42½.

The council of the Academy held eight meetings with an average attendance of 10½ members. Respectfully submitted,

THOMAS F. DWYER, Secretary.

The report of the treasurer was read by Dr. EUGENE A. SMITH. On motion report was received and referred to an auditing committee, consisting of the trustees. The report of the trustees was read by Dr. Marcel Hartwig. It was moved and seconded that the report be received and referred to a committee of two to audit. The chair appointed as such committee Drs. Eli H. Long and J. C. Clemesha. This committee later reported having audited the accounts and moved that the report of the trustees, with the recommendations, be adopted. Carried.

Reports were received from the secretaries of the Sections of Medicine, Surgery, Obstetrics, Pathology and Ophthalmology, and on motion were received and ordered filed.

The following proposed amendments to the by-laws were presented by Dr. S. Y. HOWELL:

BY-LAW I.

Sec. 1. The stated meetings of the Academy shall be held during the last week of September, November, January, March and May, on such days as the council may determine.

Sec. 2. The annual meeting for the election of officers, the reading of annual reports, and the transaction of other business, shall be held on the first Tuesday of June.

Sec. 3. The meetings of the sections shall begin the first week in October, and end with the fourth Tuesday in May. Each section shall meet at least once each month during this time, except when called upon to entertain the Academy at one of its stated meetings.

Section 3 shall become section 4.

Section 4 shall become section 5.

It was moved and seconded that a committee on revision of the constitution be appointed. It was moved as an amendment that the matter of revision of the constitution be referred to the council. Carried.

The retiring president, Dr. Matthew D. Mann, then read his annual address, the subject of which was Puerperal Infection.

Upon invitation the address was discussed by Drs. P. W. Van-Peyma, M. A. Crockett, L. Schroeter, H. D. Ingraham, I. P. Lyon, J. V. Woodruff, J. H. Pryor and S. Y. Howell.

Dr. Marshall Clinton, on behalf of the tellers, reported the result of the election as follows: President, Dr. Marcel Hartwig; treasurer, Dr. Charles S. Jewett; trustee, Dr. Joseph W. Grosvenor.

The newly elected president, Dr. MARCEL HARTWIG, was escorted to the chair and presented to the Academy by Dr. Mann. Dr. Hartwig thanked the members of the Academy for the honor they had conferred on him in selecting him as the presiding officer for the ensuing year.

He offered a prize of \$50 to be given for the best paper presented at the meetings during the coming session, the council to make the necessary arrangements.

Attendance, 51. Adjourned at 11 p. m.

Section on Surgery, April 6, 1900.

REPORTED BY MARSHALL CLINTON, M. D., Secretary.

The meeting being called to order by the Chairman, Dr. J. HENRY DOWD, the minutes of the previous meeting were approved.

Dr. PAUL THORNDIKE, of Boston, by invitation, read a paper entitled,

NOTES ON PROSTATECTOMY.

He said it was not until the publication of Mr. Arthur McGill's cases in 1888, and his own and his colleagues (of the Leed's Infir-

ary) communications to the British Medical Association in 1889 that the surgical world awoke to the possibility of attempting a radical operation for the removal of obstructing prostatic masses. He proposed at this time simply to invite attention to certain points connected with radical prostatic operating.

The present status of the treatment of prostatics may briefly be summarised as: (1) the palliation of the condition by catheter as long as the patient so can be kept comfortable; (2) then attempt to alter the existing obstruction by various operative procedures. These latter are: (a) the removal of one or both testicles; (b) the ligature of one or both vasa deferentia; (c) the removal of parts of the prostatic growth by incision, enucleation, or electric heat; or, (d) by a complete enucleation of the growth by suprapubic or perineal routes, or both combined.

He passed the tentative measures with brief comment and proceeded to discuss the radical operation, stating that the suprapubic operation with perineal drainage remains the one of choice with most surgeons. In McGill's operation the bladder is opened above the pubes, the mucous membrane covering the projecting portions of the prostate is cut through, and obstructing portions are removed by enucleation by the finger, forceps, or both. Fuller, of New York, has modified this technique by making a small opening in the mucous membrane covering the growths and enucleating them through this with the finger; he also opens the membranous portion of the urethra and drains through the perineum.

Thorndike then described the operation of Alexander and Nicoll and reviewed the statistics of all the several methods. Continuing he said, if a partial operation is done there is chance of recurrence of the obstruction; whereas, if the complete operation is done there is no recurrence. Prostatectomy is a serious operation with a mortality result of 15 or 20 per cent. He favors the Alexander operation. Alexander opens the bladder over the pubes, and then places the patient in the lithotomy position with a grooved staff passed into the bladder through the urethra. He then opens the membranous urethra, by a median incision from just behind the bulb back to the apex of the prostate. The staff is then withdrawn, two fingers of the left hand are passed into the bladder through the suprapubic wound, which serve to press the prostate downward into the perineal wound. The enucleation is then done with the forefinger of the right hand through the perineal opening.

Dr. Thorndike saw Alexander perform his first operation by this

method a few years ago. Lately, he had seen him operate on two more cases and was in each instance impressed with the ease and rapidity of the procedure. He, himself, had operated twice in this manner, and these had further confirmed his good opinion of the method. Objection to it has been made because it cannot be of use in cases where the third lobe projects much into the bladder. One of his cases was of this kind and it was interesting to realise, he said, how easily the third lobe could be pushed down and enucleated, after the more easily accessible lateral lobes had been removed. It was available, too, in small hard prostates, for such an one he had seen Alexander remove with the greatest ease.

His object in presenting the subject was to create interest in this method of operating which he was convinced had a place, and that it completely meets the requirements of the cases in which it can be appropriately done.

Concluding he said: "We have two present duties; first, to teach the general medical public the limitations of catheter treatment and the necessity of letting the surgeon be his own judge as to the proper time for interference, as well as to judge of the technical character of that interference; to teach them that prostatics should be made comfortable and kept so by radical operation, early in the disease, if other means fail or cannot be properly instituted.

"Second, to teach ourselves the possibilities which these new operations are opening up to us and to give ourselves an experience which will justify us, as it most certainly is going to do, in offering a radical operation to persons so early in the progress of the diseases, that renal complications will be as rare a cause of death as shock, hemorrhage, and sepsis are already coming to be."

DISCUSSION.

Dr. W. H. HEATH said patients will not be operated unless in extremis and then we have an organism in the poorest possible condition for any work on the genito-urinary tract. He agreed with Dr. Thorndike in his views of this trouble and thinks that large succulent prostates particularly should be removed by the suprapubic route. He reported a case on which a Bottini's operation had been performed and the patient was able to urinate at once. He wished Dr. Thorndike's opinion on this procedure.

Dr. H. MYNTER requested some information in regard to the pathology of the prostate and reported five recoveries following simple perineal section.

Dr. E. J. MEYER reported that while in Berlin last summer Sidelow reported Bottini's operation as very unsatisfactory in the hands of the German surgeons.

Dr. B. H. DAGGETT said no operation on the prostate or bladder for the relief of enlarged prostate is successful if residual urine remains afterward. Prostatectomy should be done early.

Dr. THORNDIKE, in closing the discussion, said the reason that palliative measures were so much in vogue is that they are so easy and make the patient comfortable for the time being. He thinks that as the profession generally becomes more familiar with this radical procedure and appreciates the ease with which it can be performed, with practically no death-rate, and perfect recovery with restoration of bladder function, that palliative measures will be abandoned for the choice of this operation. In regard to Bottini's operation he considers it both unsurgical, unscientific and unsafe.

On invitation of Dr. Parmenter, Dr. Thorndike removed an enlarged prostate at the Buffalo General Hospital clinic and the time spent in entering the bladder and enucleating the prostate was eleven minutes.

Attendance, 47.

Section on Ophthalmology, Otology, Rhinology and Laryngology, April 16, 1900.

REPORTED BY RICHARD H. SATTERLEE, M. D., Secretary.

The meeting was called to order at 8.50. Dr. W. SCOTT RENNER took the chair.

Minutes of last meeting were read and approved.

Dr. B. H. GROVE presented two papers: Notes on the Advancement of the Ocular Muscles (see page 879); Some Thoughts Suggested by the Local or Medicinal Treatment of Cataract (see page 881.)

DISCUSSION.

Dr. A. A. HUBBELL—I quite agree with Dr. Grove in his remarks on advancement. The operation should not only be performed for secondary deviations following tenotomy, but for the correction also of primary squint. I think, however, that convergent squint should be treated by correcting refractive errors, and when this is done early, there is often no need of operation. This method has been so satisfactory that I have seldom had occasion in many years to operate. I sometimes operate for exophoria or hyperphoria, but I do so only when other treatment has failed. When I do operate for heterophoria, I find it necessary to do more than to simply button-hole the tendon, unless by this is meant the division of the tendon up to its fascial extension. I am not able to get any effect until the essential part of the tendon is severed.

When a slight advancement is indicated, I think Stevens's method is by far the best. In advancement for squint, I have never practised anchoring the sutures in the sclera, as is done by Dr. Grove, the subconjunctival and episcleral tissues always proving sufficient. In passing the needle from within outward through the muscle as far back as is necessary, I also include Tenon's capsule and the conjunctiva, the muscle having been thoroughly loosened from the ball for quite a distance back and also to each side, and held by an ordinary fixation forceps. In tightening the sutures, I prefer to have a slight convergence. I remove the sutures in three days, believing that the adhesion of the parts to their new surroundings is as firm as at a later period. The stitches, even at this time, are more or less loosened, and serve no further purpose whatever, and are only sources of irritation.

As regards the dissipation of cataracts by medicines, rubbing, electricity, and the like, I do not believe it is ever done. For centuries, medicines innumerable—vapors, ethers, drugs, both applied to the eye and taken internally—have been used. From time to time success has been claimed, but such success has not rewarded others. The healthy lens is made up of cells and laminae, most delicately arranged, and these become broken up or disintegrated, and I do not believe any medicine or agency can restore them to a normal condition after they have once lost their integrity and transparency. I congratulate Dr. Grove in his exposure of the latest "cure" of cataract by medicine. I expect, however, that, while Dr. Grove will reach some who will heed his advice, there will be very many others who will continue to patronise these "adventurers," for operations are always dreaded, and people will try any measure, no matter what the profession think of it, which promises relief without an operation.

Dr. LUCIEN HOWE—Dr. Grove seems to consider the question of age as the standard for determining the time for operation. I think, however, that the degree of vision is more important. If this be good in each eye the longer we wait the better; if the vision be poor or decreasing, then we should operate.

As for anchoring the stitch, that is an important matter and unless care is exercised, we are apt to turn the eye too far up or too far down, especially when the muscle and fascia is drawn up in a lump. After trying many methods, I have found that three sutures give better results as to position and leave less scar.

As for remedies for the cure of cataract, I try them all whether advertised or not. The last mentioned remedy is absolutely useless. I learned a good deal of a noted quack institution in the north-eastern part of this state. A patient of mine—a prominent woman—went there twice. She came back extolling some drops that were given her. I put some of them in a normal eye and they dilated the pupil. It is not impossible that we may find a method of curing cataract without operation. Whether it will be by cataphoresis or what I do not know.

Dr. BURROUGHS—I wish to mention in this connection Dr. Kalish's method—equal parts boracic solution and glycerine. The lids after instillation to be rubbed in just such a way for ten to fifteen minutes. A relative of mine having lenticular opacities was treated by a general practitioner by the Kalish method and the development of the cataracts were certainly stopped. Later I sent a traumatic cataract to Dr. Kalish, but he refused to treat the case.

Dr. E. E. BLAAUW—I would like to ask the last speaker if he would try the Kalish method?

Dr. BURROUGHS—I should try it.

Dr. BLAAUW—I should like to know if you have ever noticed any change with the ophthalmoscope after treatment by this method in the case of your relative.

Dr. BURROUGHS—Most certainly, the periphery of the lens was decidedly cleared up.

Dr. BLAAUW—If I had a child with squint, I should not wait until it was thirteen or fourteen years of age. We should operate on both eyes. I do not think tenotomy of the interni should be done. I would prefer advancement of the externi. I have read about Dr. Ranney's button-holes. I don't think you get any result from buttonholes. It is impossible to graduate the effect you get later on. Absorption of cataract is an exceedingly interesting question. We have all seen where cataract went. So far there was stationary, then tended to clear up of itself. For example, some traumatic cataracts. Diet will accomplish much in cataracts due to diabetes or albuminuria.

Dr. ARTHUR G. BENNETT reported a case, 75 years of age, of amblyopia, associated with divergent strabismus and a high degree of hyperopia. Covering the good eye with ground glass, the sight was brought to $\frac{6}{22.5}$ with Snellen vj.

Also a case where solution of atropia had been dropped in the eye for twenty-five years for poor vision, owing to lenticular opacities. Complete atrophy of iris. Extraction of cataract was followed in five days by severe iritis. Needling of membrane was followed by severe iritis. The final result was vision $\frac{7}{16}$.

Section on Pathology, April 18, 1900.

REPORTED BY FREDERICK H. MILLENER, M. D., Secretary.

The eighth regular meeting of the Pathological Section for the season was held on Tuesday, April 18, 1900.

The meeting was called to order by the Chairman, Dr. Bennett, at 8.50 p.m., twenty-five Fellows being present.

The minutes of the preceding meeting were read and approved.

The paper of the evening was the Gynecological Mistakes and their Pathological Importance, by Dr. HERMAN E. HAYD (see p. 871).

The discussion was opened by Drs. Crockett and Mann.

Dr. M. A. CROCKETT stated the paper covered a wide field, and that he thought that they should divide the gynecological mistakes or errors into three classes; first, those mistakes where the disease is an extension of some other disease, notably that of the rectum; second, those cases due to lack of skill in diagnosis and lack of knowledge on the part of the physician. As an instance, he cited a case where ergot had been used to expell a uterine fibroid; the third is a very important class, in which there is a local lesion present and the general symptoms. The patient has anemia, backache, etc., and, save for the slight lesion, the case can only be cured by studying and treating all parts involved.

The mistakes by the general practitioner in gynecology are no greater than are made in different parts of the body by other specialists. A great many mistakes come from general practitioners, who emphasise the local lesions.

Dr. MATTHEW D. MANN stated that Dr. Hayd's paper was a very timely one as he had gone over the subject very carefully. Dr. Mann spoke of bladder and rectal troubles, which were sometimes overlooked, and cited a case of a woman, who was pregnant and had bearing down pains. A physician was called and decided to bring on an abortion. The real trouble being a gonorrheal infection of the bladder.

He agreed entirely with Dr. Hayd with regard to simple endometritis being generally due to constitutional conditions, and that it was wrong to make local applications to the uterus; we should treat the patient generally. He considered the matter of curetting the uterus very much overdone, and that a great deal of harm is being accomplished by irritating it without any good. He also pointed out a mistake he had seen made several times, namely, the anterior surface of the spinal column and aorta being mistaken for a tumor. Another common error physicians make in making a rectal examination is feeling the uterus and mistaking it for a tumor.

Dr. GROSVENOR related an experience of a young and ambitious physician, who found a young woman very willing to be operated upon; he examined the case very carefully and found a tumor, as supposed, and invited some physicians to be present at an operation; in looking for the tumor under chloroform, it had mysteriously disappeared. He referred to an error of an experienced physician, who mistook a fibroid ovarian tumor, called physicians to witness the operation, opened the abdominal cavity and instead found hydatids of the liver.

Dr. HAYD, in closing the discussion, said that he was pleased that the paper met with approval, as he had endeavored to make it profitable. Dr. Hayd also stated that mistakes are not always those of ignorance, but also those of dishonesty.

Meeting adjourned at 10.20 p.m.

Section on Medicine, May 8, 1900.

REPORTED BY J. C. CLEMESHA, M. D., Secretary.

The eighth regular meeting of the Medical Section, Buffalo Academy of Medicine was held May 8, 1900, at the Buffalo Public Library Building. The meeting was called to order at 8.45 p.m. In the absence of Dr. Long, Dr. M. D. MANN acted as chairman.

After reading the minutes of the previous meeting Dr. H. R. HOPKINS was nominated and elected chairman of the section for the ensuing year. Dr. JULIUS ULLMAN was nominated and elected secretary.

Dr. ULLMAN reported the care of a child with influenza having four distinct pneumonic attacks, otitis media purulenta, colitis, marasmus; recovery.

Dr. BENEDICT read a paper on Typhilitis and scolecises, which was discussed by Dr. Grosvenor and Dr. Dunham.

Madame Mankel gave an instructive address upon the dress of children, noting defects and pointing out improvements in construction.

Meeting adjourned at 10.50 p.m. Members present, 27.

MEDICAL ASSOCIATION OF CENTRAL NEW YORK.

The following discussion was had upon Dr. Wm. P. Spratling's paper, entitled, The Treatment of Epilepsy, which was read before the Medical Association of Central New York, at Syracuse, October 17, 1899, and which appeared in the June number of the JOURNAL:

DISCUSSION.

Dr. Wm. C. KRAUSS, Erie—I wish to thank Dr. Spratling personally for the pleasure and profit which I have derived from listening to his paper; and I think I voice the sentiment of the society when I thank him on behalf of the society on the same grounds.

To me, this paper is as important and interesting a one as I have heard in a long, long time. It is important from two points of view: In the first place, it deals with treatment; and in the second place, it deals with a disease as difficult and as hard to which to apply the proper treatment as any with which physicians have to contend. I think, in all our medical societies, we have too few papers on the treatment of diseases. We have too many on pathology and on theories and perhaps diagnosis, but we have too few on the treatment of disease; and that virtually is what we come together for, to learn something about treating and caring for the sick.

Then, another point, the treatment of epilepsy has been changing, and I believe the physical treatment, the treatment of making a strong mind by making the arm or the leg strong, is an important point which the doctor has so nicely brought out.

I notice the doctor did not say anything about the surgical treatment of epilepsy. Four or five or six years ago, we heard nothing but the surgical treatment of epilepsy, and all our cases had to be sent to the surgeon for an operation. Now we look upon the surgical treatment of epilepsy as a sort of a fallacy, a fad. Of all the cases that I have had operated on, I think there is not a single one where the operation has had any permanent benefit. For the time being, for perhaps a few months, the patient would be benefited but after that, would drift into the same habit of having their attacks, and they would come on with more force and frequency until they became confirmed chronic epileptics.

I think the point which the doctor brought out about the habit of getting an attack, the habit which these patients fall into so easily, the habit which the mind has of doing a certain thing a certain number of times and always doing it in a certain way and along certain lines, is one of the most important things which the doctor brought up in this paper. It behooves us all, in these cases of epilepsy, to make a careful and thorough examination, not only once, but repeatedly; and, then, if there is any little symptom regarding the organs of sense, send those patients to our eye friends and to our ear friends and to our nose friends, and have all the reflex phenomena pointed out to us and removed before we go on with the regular course of bromide treatment.

The cases of psychical epilepsy and those cases in which insanity appears in epilepsy, I think are also important. I remember a case of psychical epilepsy that occurred in the vicinity of Buffalo about eight years ago, where a young girl in one of these psychical conditions, killed one little girl and tried to kill another. The case was tried in court and the condition of psychical epilepsy was pointed out to the court, and the jury very wisely exonerated the girl from punishment. And yet, a few days afterwards, the judge who sat on the bench at that time, told Dr. Andrews that in his opinion the girl was shamming and it was a case of justice gone wrong. It was not. It was a case of justice gone right. I think these cases of epilepsy that show any temper and that have any spells of discontentment, are the most dangerous cases we have to deal with, because at any time homicidal tendencies creep out, and before we know it, we have a serious condition of affairs on our hands. All such cases should be taken from home just as soon as possible and put under proper restraint.

During the past summer, I had occasion to learn something about the way the Germans treat diseases, and I found that the Flechsig treatment had been virtually abandoned in northern Germany. The Germans have a queer way of treating their patients. When they have a hard case, instead of working at it in the way Americans do, they

simply send them to some bath, some watering-place, to Carlsbad or Baden-Baden, and the chronic cases are off their minds and, of course, they get the credit of doing something very bright.

In conclusion, I wish to move a vote of thanks to Dr. Spratling for the very interesting address which he has given us.

Seconded. Carried.

Dr. E. B. ANGELL, Monroe—I wish to emphasise just one point that Dr. Spratling very wisely dwelt upon, but I believe it will be for your good if you hear it repeated, and that is the way you have to deal with a case of epilepsy. Don't diagnosticate it simply as epilepsy. That has been the fault of the general practitioner time and time again, especially in dealing with that phase of nervous disease.

If you haven't much time to give to a patient when he first comes to your office, spend the time in studying the case. Give him some bromide or anything you please. When he comes back again, study the case. It is just as it is in the building of roads. A good engineer will tell you the first thing to do is drainage, the next thing to do is drainage and the third thing is drainage. It is all drainage. And so it is with the diagnosis and treatment of epilepsy. The important thing is studying the case. It is always studying the case because, after all, the essential feature of epilepsy, so far as we know it now at the present time, is the establishment of the epileptic habit, the expression of the attack; and what we want to do is to find out the way in which that attack is developed, find out what is wrong with this brain by which that attack is made possible and just so far as possible correct those conditions.

Very little is said today about the bromide treatment, about the medicines used in masking the disease and suspending the attacks. The important matter is to recognise that you are dealing with a habit, and just so far as possible, you want to teach the individual to control it. Therefore, study your case.

Dr. H. B. HAWLEY, Onondaga—I don't want to say anything about epilepsy, but the remark of Dr. Krauss brought a thought to my mind which I deem it advisable to mention, and that is the remark that the jury found this patient guilty but the judge found her in his mind not guilty. It seems to me that a great many of these cases which are dependent upon the judgment of some juror or some judge as to the question of guilt are dependent upon the wrong person, and I would like to say a word right here to this representative body of men in the line that will bring about, perhaps, at some future day, a righting of this wrong and of the subject that has been spoken of. That is to say, the proper handling, the proper committee or the proper people to pass upon these questions of sanity or insanity, of responsibility or irresponsibility for overt acts against law that are done by incompetent people. It brings to my mind the case of the justice here in Syracuse who made a remark on the bench that he had sat on the bench with a temperature of 103 or 4 and he was competent to judge of cases and therefore

that an individual who was suffering from the same temperature was competent to sit in the witness stand or in the dock the same as though he were well.

Progress in Medical Science.

OBSTETRICS, GYNECOLOGY, AND ABDOMINAL SURGERY.

By WILLIAM WARREN POTTER, M. D., Buffalo, N. Y.

CAN ERGOT CAUSE RUPTURE OF THE UTERUS?

BONG (*Monatsheft für Geburtshülfe und Gynäkologie*, June, 1899, p. 900,) in a meeting of the Cologne Obstetrical and Gynecological Society, held February 10, 1899, discussed a case of uterine rupture in a multipara, to whom a midwife had administered a drachm of ergot within a short time. The pains became much stronger for a while, and then suddenly ceased with slight hemorrhage into the vagina. Bong was summoned, and found the fetal head in the pelvic inlet with the os dilated as large as a silver dollar. No fetal heart sounds. He made a diagnosis of atony and used expectant measures. On the next afternoon the patient collapsed. Examination revealed a right-sided uterine tear. Delivery was accomplished by turning, and manual extraction. The autopsy showed much blood in the peritoneal cavity. Bong was of the opinion that the ergot had produced uterine tetanus, and that the locality of least resistance had ruptured. The head was in the second vertex position, and the tear occurred in the right side of the lower segment. Ergot is doubtless at the bottom of many a case of so-called spontaneous rupture of the uterus at the hands of midwives. In the discussion Frank related a parallel case, and agreed with Bong in attributing the blame to ergot.

UTERINE INERTIA.

DORSETT, (*Denver Medical Times*,) has used phosphate of strychnine (grain 1.100, gradually increased to grain 1.25) with very satisfactory results during the gestation period of anemic and debilitated women. In addition to the local action upon the uterine musculature, it promotes assimilation, relieves constipation and prevents the often observed chilliness or rigors after labor. Under this treatment he has not found it necessary to employ ergot for the past five years in his obstetric practice.

THE EARLY SYMPTOMS OF PUERPERAL INFECTION.

FERRÉ (*L'Obstétrique*, ii, No. 5, p. 425,) points out that the general notion of the sudden onset of marked symptoms of puerperal infection after a longer and shorter period of silent incubation is inexact. Even in the period of incubation, important, although attenuated, symptoms may be present, and their recognition will greatly conduce to successful treatment. These early symptoms are: slight elevations of temperature occurring once or twice daily, and usually in the evening; a pulse rate of 80 or more, especially if in the morning, when the temperature is not yet raised; relative or absolute insomnia, which is a very important indication of serious infection and requires careful inquiry; headache, at first intermittent and slight, usually always in association with the other symptoms mentioned; sometimes diminution or suppression of the lochial discharge, although as a rule this is a later manifestation; and, finally, vague impressions of cold, but not usually a distinct rigor. The later symptoms, such as marked rigors, high temperature, local pain, etc., are well known; it is to the recognition of the early symptoms that we must trust for the successful treatment of such cases.

PRURITUS VULVÆ.

THIS annoying and so often obstinate disturbance justifies frequent reference in journals. Herman (*British Med. Jour.*) makes the following classification which is most excellent:

1. Adventitious, due to dirt, pediculi, worms, or pessaries.
2. Skin diseases—eczema, herpes, or furuncle, follicular urticaria and diabetic dermatitis.
3. Irritating discharges, such as gonorrhea, cancer, senile endometritis; also cases in which no visible discharge is apparent.
4. Venous congestion, due to heart, liver and lung diseases.
5. Nervous affections.

For each division the following treatment is recommended:

1. White precipitate ointment for pediculi. For the other causes, absolute cleanliness and changing of the material of pessaries.
2. For eczema, usually affecting fat, elderly women and those pregnant, when due to pruritic organisms, warm hip baths, with liquor carboni detergens added, and the parts powdered with boric acid. When due to diabetes, general treatment. Herpes zoster did not respond to treatment. For follicular pruritus it is recommended to squeeze out the contents of follicles and apply corrosive sublimate, 1 to 2000.

3. Antiseptic and sedative douches, and sedative dusting powders on the vulva, as a saturated solution of borax and solution of boric acid. In case of failure with these try 1 to 7 solution of carbolic acid.

4. The same local treatment as for class two with general constitutional treatment.

5. Pruritus, when occurring in aged women, is frequently a symptom of degenerate changes, and treatment usually fails.

THE EARLY DIAGNOSIS OF UTERINE CANCER.

WIENER, (*Amer. Jour. Obs. and Diseases of Women and Children*, December, 1899,) says: The early diagnosis of uterine malignant disease is one of the most difficult and responsible which the physician is called upon to make. Every error in diagnosis costs a human life; every delay endangers one. It is not only dangerous, but impossible, to make the diagnosis from symptoms alone, as there are no symptoms that are pathognomonic of cancer of the uterus. Pain seldom occurs in the early stages, and the discharge if present, is due to the pre-existing endometritis, and not to the new growth. Hemorrhage should always arouse suspicion, but in an organ which is subject to physiological hemorrhages the symptom is often overlooked, and especially when occurring at the menopause.

Malignant uterine disease is too apt to be looked for in advanced age only, while, in fact, statistics demonstrate conclusively that the majority of these cases are found before the menopause, and quite a number during the earlier years of sexual activity; fewer in old age. If pre-existing pregnancies influence the development of cancer it is indirectly, in that they give rise to endometritis. Endometritis is undoubtedly a very important etiological factor. It is present in almost all cases. The belief that uterine lacerations are predisposing causes is not now generally held. It develops in virgins and in nulliparæ, as well as in multiparæ. By inspection and palpation in the early stages, we cannot be sure of the structure of the new growth if that can be felt at all. By digital examination we can only find out which part of the uterus should be scraped most thoroughly. Microscopical examination of the uterine scrapings is the only accurate method of diagnosis. The whole interior of the uterus should be curetted most thoroughly, as approximately normal tissue is often found side by side with malignant degeneration. Dilate the cervical and uterine canals and use a sharp curette always, as a dull curette may not remove any part of the new growth if it originates as a hard nodule, or if it is some distance from the surface.

By early diagnosis alone can the number of operable cases be increased, and also the number of permanent cures. Jacobs, of Brussels, says that of seventy cases of uterine cancer in which he had removed the uterus only three were alive four years later. Thorn, of Magdeburg, reports that after five years less than 30 per cent. of the operated cases were alive. This is due to the fact that 70 per cent. of all cases are inoperable when first seen, and in many of the remaining 30 per cent. the disease has extended beyond the uterus. Bäcker, of Budapest, out of 705 cases, reports seventy, only 10 per cent. in which hysterectomy could be performed, and even of this small number very few remained radically cured. Malignant disease of the uterus must, by the scrapings, be distinguished from:

1. Endometritis, glandular and interstitial.
2. Necrotic myomata.
3. Polypi.
4. Placenta retenta.
5. Abortion.

CANCER OF THE UTERUS.

MCMURTRY, as a prophylaxis (*Amer. Prac. and News*, March 15, 1900,) in cancer says more operations ought to be done for lacerations of the cervix. A woman between forty and fifty years of age, who has borne children, ought invariably to be examined, and, when the physician finds she has a laceration of the cervix, a deep ulceration in the neck of the uterus, it ought to be repaired. Here is the greatest field of usefulness there is in connection with this disease. It is a very simple operation, it has no mortality, and it brings about a great deal of relief to the patient. All women who have the slightest disturbance of the menstrual function, or any hemorrhage from the uterus after the age of forty, ought to be very carefully examined with a view of finding an old laceration of the neck of the uterus, and, if such a condition be found, it ought to have immediate attention.

Sterile women and unmarried women who have never borne children do not, as a rule, have cancer of the uterus; multiparous women, who have borne a large family of children, are the ones especially prone to cancer of the uterus. The only way this can be explained is upon the hypothesis that there is some connection between laceration of the cervix and cancer; that there is something about the lacerated uterine neck which invites the morbid process.

NEUROLOGY.

CONDUCTED BY WILLIAM C. KRAUSS, M. D., Buffalo, N. Y.

ADDICTION TO DRUGS, ESPECIALLY IN REFERENCE TO THE MEDICAL PROFESSION.

DEWEY, RICHARD, of Wauwatosa, Wis. (*Medical Age*), states that the statistics as to morphine habitués treated in Prussian sanitariums show that of sixty-two male patients, almost one-third were physicians, and of eighteen female patients, three were wives of physicians.

My experience is that in twenty-eight cases of morphine and cocaine addiction under my care in four and a half years, thirteen were physicians, a percentage of forty-six. Taking physicians and the sporting fraternity together, the percentage would have been seventy.

The sporting class and demi-monde are specially prone to drugs as well as alcoholic excesses. I would emphasise, however, the fact that a great difference exists as to the reason for these excesses in one case and the other. The physician is wearing himself out in loyal and unselfish service; the other class in vicious and licentious courses. He is watching at the sick bed, while they are reveling; he takes something to brace himself for a new effort for humanity, while they are engaged in plundering and pandering.

The conclusion arrived at is that the percentage may be overestimated or underestimated, and is likely never to be accurately determined. There is, nevertheless, far more inebriety of this kind than appears on the surface. It is also likely to be overestimated in the public mind and an unjust suspicion to attach to the profession. As a professional body we should not only be virtuous, but above suspicion, and if necessary should promptly repudiate drug habits and those who practice them.

I have not sought to say anything here of the interesting subjects of diagnosis and symptoms of drug habits, of prognosis or of therapeutic means—all of which merit new and thorough study, and concerning which I hope to give my experience at another time.

I will close with a word concerning the most important subject of all—prophylaxis. It should be an inflexible rule with every physician neither to prescribe nor use the drugs that induce vicious habits except when absolutely indispensable and when absolutely controlled by himself alone, and, furthermore, never to employ these powerful agents of good or evil in his own person except when prescribed for

him on each occasion by a brother physician in whose skill and integrity he may place absolute confidence.

SCHOOL BREAK-DOWNS.

BARTLETT, J. HENRY, of Philadelphia, (*Medical News*, June 16, 1900,) presented a paper on this subject before the Section on Diseases of Children, A. M. A., Atlantic City, June 6, 1900.

Reference was made to an article in a first-class monthly in which the writer claimed that 16,000 children in five large cities had been compelled to leave school in one term because of breaking down in health. The belief that this result, as claimed by the writer, is due to the present school system is unwarranted. Causes other than school-life which play a large part in ill-health, causing the child to leave school were considered. The principal ones are diet and haste in eating, lack of exercise, and the hours of sleep. These all occurring during the developmental period cause deterioration in the child's condition. Whatever the school strain may do, it has a host of allies. In some cases the school may be a safety-valve where the evil effects of some of the other influences may be set aside. A thorough study of the developmental processes needs to be made to get at the bottom of what the writer of the article in question calls a crime. The school system is good in many ways; too many examinations, etc., are simply an overdoing of a principle and are not essentially a condemnation of the principle itself.

ETIOLOGY AND TREATMENT OF CHOREA.

MONCORVO (*Pediatrics*) presents the following as to the etiology and treatment of chorea:

1. The frequency with which nervous and other symptoms are met in chorea places beyond doubt their influence as etiological factors.
2. Hysteria appears to exercise a marked influence on the onset of chorea, so much so that some authors have regarded the latter a form of it.
3. According to certain writers who have remarked the close connection between chorea and the infectious diseases common to a secondary affection, it is the sequel of those virulent diseases.
4. On one hand, the close relation between chorea and rheumatism, so long admitted by clinicians of the highest standing, and, on the other, the bacteriological nature of rheumatism as proved

by Achalme, Thiroloix, Triboulet, Coyon and Ladoc, lead him to see in chorea only the cerebro-medullary tendency of a rheumatic infection developed in the hysterical or neurasthenic temperament.

5. Of the numerous remedies to which resort has been made in the treatment of chorea, the author gives the preference to those derived from the aromatic series, such as antipyrin (the proper dose of which he has determined), exalgine, asaprol and analgine.

6. While these remedies have been of undeniable efficiency in the treatment of rheumatism, it is equally true that under their action all choreic manifestations disappear within the space of from eighteen to fifty days.

7. The author's personal observations have assured him of the successful outcome of this treatment, at least in the case of children whose subsequent history he has been able to follow.

THE NERVOUS SYSTEM IN PULMONARY PHTHISIS AS A BASIS FOR TREATMENT.

MAYS, THOMAS J., Philadelphia, (*Medical News*) read a paper with this title before the American Climatological Society, at Washington, May 3, 1900.

The author holds that phthisis is an exhaustion of the vital forces of the body in which loss of appetite, fever, nightsweats and other well-known symptoms accompany or precede the earliest implication of the pulmonary organs; he believes that the original trouble in the great majority of cases lies in the brain and nervous system and particularly in the pneumogastric nerves. That the vagi are primarily involved in phthisis Dr. Mays has shown in rather a large collection of cases in which confirmation was made post-mortem. Holding these views as to the etiology and pathology of phthisis, Dr. Mays discards all the usual remedies and employs those measures which stimulates the nervous system, such as strychnine, static electricity, quinine, capsicum, etc. He also employs massage of the vagi in the neck and subcutaneous injections along their course. The dose thus used was five minims of a 2½ per cent. solution of silver nitrate, preceded by a similar dose of a cocaine solution. The technic was described. Dr. Mays has used silver nitrate injections in about 200 cases of phthisis during the last nineteen months. The results were gratifying, the cough and expectoration were greatly relieved or ceased altogether, dyspnea and oppression of the chest were relieved; vomiting increased in a marked degree; the general

strength improved. The effect on the physical signs was equally gratifying. This was particularly true of the gain in body weight. Dr. Mays believes that if this auxiliary method is combined with other good hygienic, dietetic and medicinal treatment the practical results will be greater than without that method, and he claims that the nervous system is the principal avenue through which pulmonary phthisis may be successfully approached from a therapeutic standpoint.

ETIOLOGY OF PARESIS.

KRAFFT-EBING, VON R., of Vienna, (*American Journal of Insanity*, April, 1900,) in an excellent article says:

Enough has been said to prove beyond question that progressive paralysis, in the present day, is a scourge which decimates modern society. But, as a fact of no less importance, it is to be noted that the disease now seeks out its victims at a much earlier period of their lives. Calmeil, in France, in the twenties of the present century, found 44.5 years to be the average age for the onset of paresis. At the end of the eighties, Arnaud found it to be 39.5; Regis, exactly 38; whereas Kaes, in Hamburg, concluded that the majority of cases occurred between the ages of 36 and 40 years. This earlier onset of the disease has to be explained by assuming not only a greater prevalence of certain etiological factors, but also a lessened resistance to their baneful influences.

Still more startling is the occurrence of the disorder in childhood and youth, which has only lately been noted. As an illustration of this point, it may be said that whereas Baillarger before 1850 found among 400 female paretics only one under 20 years of age, in the literature since 1877 numerous instances of juvenile paresis are recorded.

Perhaps one of the most ominous features in this connection is to be found in the increase of paresis among females. Until well on in the sixties the number of male to female paretics in insane asylums stood in the proportion of 8 to 1; at the end of the seventies, according to Jung (Leubus), it was as 4 to 1. Early in the eighties it was calculated by Reinhard, for Hamburg, at 3.2 to 1; by Meynert, for Vienna, 3.4 to 1; by Siemerling, for Berlin, 3.5 to 1.

For the beginning of the nineties, Idanoff established it for various countries as follows: For Denmark, 3.9 to 1; for middle and upper Italy, 3.3 to 1; for Russia, 3.15 to 1; for England, 2.98 to 1; for Belgium, 2.76 to 1; for France, 2.4 to 1. These figures,

however, certainly do not accurately represent the incidence of paresis among women at the present day, since the disorder occurs in them very frequently under the form of a simple dementia and often runs so mild a course that many of the cases are never confined in insane asylums and are consequently not included in the above-mentioned figures.

PARETIC DEMENTIA.

THE following is a report (*American Journal of Insanity*, April, 1900,) of some of the features of forty-three cases of paretic dementia admitted in an eastern Michigan asylum, Pontiac, during the past three years :

Admitted January 1, 1897, to January 1, 1898, 22 cases—10 per cent. of all admissions.

Admitted January 1, 1898, to January 1, 1899, 15 cases—10 per cent. of all admissions.

Admitted January 1, 1899, to January 1, 1900, 6 cases—5 per cent. of all admissions.

Admitted January 1, 1897, to January 1, 1900, 43 cases—9 per cent. of all admissions.

Knee-jerk absent in 8 cases, 19 per cent.; present in 8 cases, 19 per cent; knee-jerk active in 27 cases, 64 per cent. Superficial reflexes absent in one case; present in 19 cases, 45 per cent; active in 8 cases, 36 per cent.

Causation: Syphilis in 27 cases, 62 per cent;; intemperance in 6 cases, 1 per cent; unknown 3 cases, 1 per cent; doubtful 4 (probably syphilitic), 1 per cent.

Pupils: Pupils regular, 9 cases, 22 per cent; irregular, 24 cases, 57 per cent.; right larger, 14 cases; left larger, 10 cases; Argyll-Robertson, 4 cases, 11 per cent.; bilateral dilatation, 1 case; no reaction of left pupil, 1 case; no reaction of right, 1 case; hippus, 2 cases; immobile, 10 cases, 28 per cent.

IF THE gall-bladder is so seriously diseased as to warrant surgical relief, it is better practice to remove it in toto than to leave it as a place for the further accumulation of gall-stones, or as a point for the setting up of new inflammations.—*International Journal of Surgery*.

Selection.

CLINICAL AND EXPERIMENTAL USE OF ORTHOFORM.

By DR. AUGUST LUXENBURGER,

Assistant to the Surgical Polyclinic of the University of Munich.

Reprint from the *Münchener Medizinische Wochenschrift*, Nos. 2 and 3, 1900.

[Translated for the BUFFALO MEDICAL JOURNAL.]

SINCE the first publication, over a year ago, of the reports of Prof. Klaussner and Dr. Kallenberger upon the favorable results obtained with the local anesthetic orthoform, this preparation has been extensively used upon the ample material offered in the surgical ward of the Polyclinic of the University of Munich. It is, therefore, opportune, after these exhaustive experiments and the collective reports of numerous other authors, to give a conclusive opinion upon this new preparation, which will justify the adoption of orthoform as a remedial agent of the physician and particularly of the surgeon. The surgeon, above all others, demands of a new chemical agent, that, next to its primary object—in this case local anesthesia—the remedy should be innocuous, *i. e.*, should neither retard the process of healing or in any way interfere with the general organism.

As a prime condition, therefore, orthoform as delivered from the laboratory must not contain infectious germs. Repeated experiments with agar, gelatine and bouillon have shown that orthoform fully answers this prime condition—sterility. Lichwitz and Sabrazes expressed the same favorable opinion. After their subsequent experiments with this remedy they came to the conclusion that orthoform possessed a moderate antiseptic action.

Its strongly antiputrid quality in contact with albumin was pointed out by Kallenberger and corroborated by Mosse, who also mentioned that it was possible to prevent the ammonia fermentation of urine by the addition of orthoform. Of this fact I have been able to convince myself also. An addition of 0.5 per cent ($\frac{1}{2}$ per cent.) of orthoform to urine will not only prevent the ammonia fermentation for weeks, but fermentation already begun may be resisted by this quantity and fetid smelling urine rendered almost odorless. Alcoholic fermentation produced by yeast in saccharin urine is also considerably retarded by orthoform. To further determine the antiseptic properties of orthoform, which were classified by Liebwitz and Sabrazes as "moderate," I instituted a number of experiments with cultures of various microorganisms, especially those promoting suppuration, with

the addition of orthoform, using the customary media for propagation. The results are shown in the following experiments.

Orthoform was strewn upon fresh coatings of agar cultures of bac. pyocyaneus, staphylococcus citr., and streptococcus, and the same cultures, for comparison, treated with lycopodium and iodoform. Transplantations showed that under lycopodium and iodoform the cultures flourished without hindrance, while those under orthoform remained sterile. These experiments made with orthoform conclusively proved that it possessed the property of arresting the development of bacteria, and it now remained to follow this up and establish the quantitative strength of this property. This was comparatively easy as orthoform is soluble up to 1 per cent. in agar, gelatine and blood serum, showing a light, yellowish brown discoloration due to the slightly alkaline reaction of the former.

TABLE NO. I.

Per cent. of Orthoform.	1.0%.	0.5%.	0.32%.	0.25%.	0.17%.	0.125%.	0.1%.	0.05%.
Bac. pyocyan ...	No colonies.	No colonies.	No colonies.	Few colonies, sparse.	Light covering.	Thick covering.	Thick extensive covering, no coloring.	Very strong growth, some odor, no coloring.
Staphyl. citreus	No colonies.	No colonies.	No colonies.	No colonies.	Isolated colonies.	Moderate light yellow low covering.	Thick yellow covering.	Thick yellow covering.
Streptococcus...	No colonies.	No colonies.	No colonies.	No colonies.	Isolated colonies.	Moderate covering.	Moderate covering.	Plentiful covering.

See results obtained in the following experiments made with orthoform gelatine of various percentages: Ten c.cm. each of variously prepared gelatines were inoculated respectively with an iota of bouillon culture of bac. pyocyaneus, staphylococcus aurens, etc., and after being thoroughly incorporated into this medium were poured into equal sized petri-discs. After standing two days at a temperature of 22° C. the results shown in the following table were obtained :

TABLE NO. II.

Per cent. of Orthoform.	1.0%.	0.5%.	0.32%.	0.25%.	0.17%.	0.125%.
Bac. pyocyan.....	No colonies.	No colonies.	No colonies.	No colonies.	Average 10 colonies in the field of vision.	Countless colonies, no coloring.
Staphyl. citreus.....	No colonies.	No colonies.	No colonies.	No colonies.	Average 4 colonies in the field of vision.	Average 9 colonies in the field of vision.
Streptococcus	No colonies.	No colonies.	No colonies.	No colonies.	Average 13 colonies in the field of vision.	Average 35 colonies in the field of vision.

The plates which contained the 0.5 per cent.—0.32 per cent. and 0.25 per cent. (respectively $\frac{1}{2}$ per cent., $\frac{1}{3}$ per cent., and $\frac{1}{4}$ per cent.) of orthoform gelatine, and which had not shown a trace of bacteria growth, were now gradually melted at a degree of 37° C., and the percentage of orthoform reduced to $\frac{1}{4}$ of the former strength by the addition to each of twice the volume of gelatine. After forty-eight hours a more or less luxuriant growth of bacteria was noticed, which proved that 0.5 per cent. 0.32 per cent. and 0.25 per cent. was not sufficient to destroy the germs although it had checked their growth.

Experiments with blood serum were made with orthoform and gave the following results :

TABLE NO. III.

Per cent. of Orthoform.	1%.	$\frac{1}{2}$ %.	$\frac{1}{3}$ %.	$\frac{1}{4}$ %.	1-5%.	1-10%.	1-15%.	1-20%.
Bac. pyocyan.	No colonies.	No colonies.	No colonies.	No colonies.	Colonies very sparse.	Few colonies.	Very many colonies.	Thick covering, no coloring.
Staphyl. citr.	No colonies.	No colonies.	No colonies.	No colonies.	No colonies.	Few weakly colonies.	Abundant pale yellow covering.	
Streptococcus	No colonies.	No colonies.	No colonies.	No colonies.	No colonies.	Moderate covering.	Thick covering.	

These experiments were further backed up by another, of a similar nature, made by Lichwitz and Sabrazes. Bouillon cultures of pyocyaneus and staphylococcus albus, which were several days old, were thoroughly mixed with orthoform, placed in an incubator and frequently shaken up. Transplantations made from them after three or four days proved that the germs of the former had been entirely killed.

More importance should perhaps be attached to another circumstance. In the accompanying tables it is frequently shown that under the influence of orthoform, even of the lowest per cent., bac. pyocyaneus develop scarcely any color, and produce but little odor, and that staphylococcus citreus grew only pale yellow. Furthermore, it was easily seen that transplantations from orthoform cultures were much slower to darken bouillon, apparently, as if they had to recuperate; in short, bacteria which had been raised under the influence of orthoform, seemed to have lost much of their vitality. This made room for the hope of eventually reducing their virulence in like manner. This question was solved by the following experiment. Three rabbits were inoculated each with $\frac{1}{2}$ c. cm. of a virulent streptococcus culture, but with this difference:

A was inoculated with a culture that had been kept for ten hours thoroughly mixed with orthoform: B with culture under influence of orthoform for five minutes and C with pure culture. Rabbit C died of sepsis after $1\frac{1}{2}$ days; cocci were found in blood and organs. B developed a large abscess and died in three days; post mortem showing like conditions as C. A remained well, showing at the point of injection only a slight, rapidly disappearing swelling. In these experiments I believe to have sufficiently demonstrated the not inconsiderable antiseptic value of orthoform.

As no germs are found in orthoform when it leaves the laboratory, and all germs that might accidentally find their way into it by exposure, are either entirely annihilated or lose their virulence by contact with it, the remedy may always be used without further sterilisation. As orthoform cannot be classed as an antiseptic, it is, therefore, necessary to combine with its use some antiseptic of known quality, as it is also necessary for pertinent reasons to sometimes combine with it some substances that will assist granulation and others that will retard secretion. It was, therefore, desirable to know what effect orthoform would have upon these various chemicals when in continued contact with them, and if applied simultaneously there might not result some unknown chemical compound that could eventually prove dangerous to the wound. In this direction the author has made a number of experiments which prove beyond question that among the commonly used disinfectants formalin, nitrate of silver and permanganate of potassium solutions should not be used in conjunction with orthoform. Corrosive sublimate does not lose its efficiency by the addition of orthoform. Turpentine, tincture of iodine and solution of copper sulphate are indifferent to its action. A combination of ichthyol offers advantages inasmuch as glycerin or collodion may be used as a vehicle. Other good combinations with orthoform are: Iodoform, thioiodoform, dermatol, zinc oxide, euorphen, aristol, calomel and salicylic acid. Bismuth subnitrate, mixed with orthoform assumes a chocolate brown color, and it is now advisable to use them in combination as a powder. Carbolic acid in 3 per cent to 5 per cent. solutions is not affected, neither are lysol or kreosol solutions. Lead water, borates and acetate of alumina do not decompose orthoform.

In the following numerous cases orthoform was used sometimes alone, but mostly in combination with some of the chemicals above cited: 35 cases of more or less infected bruised finger tips, with or without fracture of the phalanges, broken joint or torn tendons.

Treatment: Dusting with pure orthoform; bandaging with moist boric acid or acetate alumina gauze once daily for two or three days.

Twenty-two cases of severe cuts, especially upon the hands and the lower limbs: Treatment: Dusting with orthoform for three or four days, and bandaging with iodoform gauze, or where infection was apparent or suspected with acetate alumina gauze.

Twenty cases of infected incised wounds, mostly with lymphangitis. Treatment: Three or four days' daily application of orthoform powder, covered with moist bandages of lead water or solution of corrosive sublimate. Clinical observations did not reveal any weakening of the corrosive sublimate action in the presence of orthoform.

Twenty-eight cases of abrasions of the skin, particularly on the vola manus and on the shins. Treated with 5 per cent. to 10 per cent. orthoform-dermatol salve where no infection existed.

Thirty-one cases of burns, of the second degree, with benzin, alcohol, etc., including scalds from steam and burning with acids—mostly of the hands face and forearms. These cases which came under treatment immediately after the accident, with possibly no infection, were treated after opening of the blisters, with a 10 per cent orthoform-dermatol starch powder, and later with a 10 per cent. orthoform-dermatol vaselin salve, if the secretions remained within moderate bounds. Signs of infection were followed up with applications of lead water, and the surface of the wounds dusted over with orthoform.

Eight cases of running ulcers, mostly on the lower limbs, some reaching to the bone. Daily application of orthoform for eight to twelve days in combination with moist corrosive sublimate or iodoform gauze or mercurial ointment. Dirty looking surfaces of ulcers were often successfully cleaned by the application of three parts of calomel and one part orthoform and bandaging with chloride of sodium solution.

Five cases of tubercular ulcers, two on the neck and three in the mouth required many weeks of treatment with equal parts of orthoform and iodoform.

Five cases of traumatic ulcers on the foot, mostly accompanied by lymphangitis; treated by dusting with orthoform and bandages of acetate of alumina.

Three cases of decubitus—ulcers on the back of the size of a hand. One very greasy, coated and fetid ulcer; the odor was destroyed by the use of orthoform alone. In this, as in other cases

the ulcers were cleansed by powdering with orthoform; application of lead water bandages without gutta percha; finally, orthoform-dermatol powder or salve. All healed.

Four cases of trophic ulcers on the volar side of the great toe, tabic, 2; diabetic, 1, arteriosclerotic, 1. Application of orthoform and iodoform, or orthoform and glutol, or orthoform-ichthyol salve. Where much swelling surrounded the ulcers orthoform and salicylic acid—equal parts—were used. Two healed; others improved.

Fifteen cases of varicose ulcers on the lower limbs; mostly highly painful, so-called erethic ulcers of various sizes; some with symptoms of moderate infection, secreting freely; some with atonic, swollen edges and serous secretion, and poorly granulating ground. The troublesome erethic ulcers were soon relieved by powdering with a mixture of orthoform-dermatol and talcum powder or salve over which a dry gauze was placed, held by a centripetal elastic bandage. When much pain prevailed, with obstinate healing, strict confinement to the bed was ordered. During the day oft repeated applications of Burow's solution, and for the night orthoform powder and bandaging with lead water. Foot ulcers which were much inflamed were treated twice daily with moist applications of acetate of alumina and once daily powdered with orthoform and later sewed up with a 5 per cent. gauze compress of orthoform clay. This was of great advantage where there was much secretion. In atonic ulcers orthoform was only used to allay the pain attending the necessary application of a cautery. Applications of three parts of calomel and one part orthoform, over which wet compresses of chlorid of sodium are placed, were borne without pain. A cautery of a 2 per cent. to 5 per cent. solution of chlorid of zinc, or tincture of iodine, may also be applied without pain if orthoform anesthesia has been resorted to twenty minutes before applying the cautery. To prevent crusting, and also to facilitate the removal of remnants of powder, it is advisable to cover the ulcer with a coarse gauze before applying the orthoform powder. In this manner all surplus powder may be easily removed. Finally, in cases where moist applications are indicated for a number of days, the parts surrounding the ulcer are covered with a thick paste of oxide of zinc. Of the fifteen cases cited, ten healed with healthy scars, without operative process; four were still under treatment with prospective early recovery, and one case apparently incurable on account of general decrepitude. Among the patients are some who have used the orthoform treatment for six weeks.

In two cases of chancroid, orthoform was applied twenty

minutes before applying a cautery of sulphate of copper, with the effect of reducing the enormous painfulness to a minimum.

Of five carcinomatous ulcers, one on the tongue, showed the most pronounced orthoform reaction. The anaesthetised patient was able to eat comfortably once more, and to have quieted the rebellious trigemini for three to five hours. The same happy results were obtained in the treatment of an ulcerating carcinoma of the penis. Here also the fetid odor rapidly disappeared upon dusting with orthoform. One patient with rectal and anal carcinoma experienced much relief from 10 per cent. orthoform suppositories. Another suffering with tonsillar carcinoma was relieved only as far as deglutition was concerned—the pains radiating to the ear continued on. No disturbance of the digestive functions followed the orthoform unavoidably swallowed. In three cases of anal fissure the introduction of cocoa butter suppositories, containing 10 per cent. orthoform allayed the troublesome burning that followed stool. Powdering with orthoform permitted painless cauterisation with argent. nitr., which followed twenty minutes later.

In five cases of ingrown nails pain ceased and the granulations disappeared in a few days upon the application of equal parts of orthoform and salicylic acid.

In four painful fistulæ—1 anal, 1 urethral and 2 tubercular—the latter on the neck, cocoa butter points or pencils containing 5 per cent. orthoform were used with excellent results.

Three ulcers following frost-bite were rapidly healed with an ichthyol-orthoform salve of the following formulæ: ichthyol, 3.0; orthoform, 2.0 and vaselin, 30.0

In the cases so far cited, 198, the object of the application of orthoform, anaesthesia was fully realised and anaesthesia usually set in within three to five minutes, rarely later than eight minutes, accompanied only by a slight burning sensation, provided, however, that lesion of the skin would allow the remedy to come into direct contact with the nerve terminals. Anaesthesia can be kept up for a long time by the deposit of a larger quantity of orthoform, as small quantities come into action from time to time until all is used up. Where orthoform is less adherent, as for instance, in tonsillar carcinoma, and, therefore, the deposit of a quantity impossible, also on account of localisation, or in cases where abundant secretion washes the powder away, the intensity and duration of the anaesthesia is necessarily lessened. This can be compensated for by oft repeated applications. The average duration of the anaesthesia was ten hours, at one time it

lasted two days. Anesthesia lasting seven days was observed by Hecker after insufflation of orthoform in a case of laryngeal ulcer. The intensity of the anesthesia may attain such a degree that curetting may be undertaken upon granulated surfaces preparatory to skin grafting. The manner of application for this purpose is as follows: Two or three hours before curetting is intended, the granulations are freely powdered with orthoform over which a gauze saturated in boric acid and alcohol is placed, and over this a Billroth battist. The good services rendered by orthoform in the hands of the surgeon in accidental surgery gave rise to the idea of using orthoform to allay the afterpains following operations. In this direction others have also made use of orthoform and found it very serviceable. Blondel recommends tamponing with orthoform after curetting of the uterus. Gompers has used it after operating on the nose and ear. Dreyfus used orthoform after operating for phimosis. If it should be found that orthoform will give the patient the much needed rest, after an operation, its use would be much to be preferred to morphin injections, as orthoform does not seem to affect the general condition.

The following cases demonstrate that by the application of orthoform after pains are entirely prevented or reduced to a minimum in many instances, so that it is seldom necessary to resort to morphin injection.

In eight cases of transplantation of skin, an application of a 10 per cent. orthoform salve prevented the burning pain usually following the excision of the skin. After tamponing with orthoform in incisions of five abscesses in various regions, and two ulcerating bursities of the olecranon the general condition remained unchanged.

Sixteen pararites, five paronchial and six phlegmonic, gave no further trouble after incision and tamponing with orthoform gauze.

Six furuncles and two carbuncles were rendered painless by insufflation of orthoform and bandaging with acetate of alumina.

In five cases of curetting of cheesy, tuberculous glands of the neck, and actinomycoses of the skin of the throat, the patients obtained relief from orthoform and fell into a sound sleep. The same may be said of three cases of curetting of inguinal buboes.

In nine cases of curetting of tubercular bone craters, and the use of orthoform and iodoform tampons, the afterpains that followed were only very slight.

In seven thermocauteries—for angioma, 1; lupus, 2; nevus, 2; anal-fistulæ, 2; orthoform-dermatol salve or gauze did very good service.

In six cases of dental narcosis; insufflation of orthoform prevented not only the appearance of all afterpains, but also all fetid odor.

In operating on three ingrown nails and removal of the nail, good results were obtained with orthoform gauze. These last three operations formed the initiative to the use of orthoform after aseptic operations.

While the need for a remedy to allay afterpains was not so great in these cases as in the preceding cases still operations on the periosteum and tendons, which are generally followed by intense afterpains for one or two days, left room for a desirable and safe anesthetic. As possible disadvantages that might result from the use of orthoform, besides the one already disposed of—infection of the wound—the only other one to be feared was a possible hindrance of primary contact. That this was not the case was satisfactorily demonstrated by various experiments upon animals. The thigh muscles of a rabbit were crushed by means of a clamp, orthoform freely applied and then sewn up. Perfect healing resulted in a few days without extra secretion. In another experiment the sinews were cut through, sewn together and freely powdered with orthoform. These were thoroughly grown together in sixteen days. The radius in two other animals were sawed through, treated with orthoform and were found to knit in three weeks.

As subjects for clinical experiment, the numerous cases of atheroma of the face and back were preferably selected. As these atheroma often occurred in a multiple form and patients often had a number of them removed at one sitting this gave a chance for comparative treatment. A variation in the time of healing of the excisions treated with or without orthoform could not be noted, but one not very serious symptom appeared. Wounds already dry would sometimes develop, for a short time, parenchymatous bleeding when the orthoform had begun to act. The wound then shows at first a gray, and afterward a blackish-brown discoloration. The supposition that this meant a change of the coloring matter of the blood into methemoglobin was not verified, as a spectroscopic examination of defibrinated blood, mixed with orthoform, after some time plainly shows the line of reduced hemoglobin, or, shaken up with air, the two characteristic lines of oxyhemoglobin. The brown color of the blood is, therefore, evidently the result of the discoloration of the orthoform, which has been noticed in powder crusts, on wounds, after two or three days.

The process of healing in 25 atheromæ, 2 lipomæ and 4 operations on glands further demonstrated that the presence of orthoform pre-

vented infection of the wounds. In the following minor operations there was no more suppuration from the use of orthoform: 4 extirpations of buboes, 4 excisions of lupus and carcinoma, 9 finger amputations, 5 incisions in fingers to remove foreign substances, 2 operations for phimosis and 5 sutures of sinews. The wounds were dusted with orthoform, and, in consequence, the dreaded first night after the operation was made much more bearable to the patient, so that here also the use of the remedy was justified. The hope that hereafter the use of morphin injections, even after the largest surgical operations, could be entirely dispensed with will hardly be realised as the necessary doses of orthoform for this purpose would be too large. Although our experience so far has taught us that orthoform is non-poisonous, it is only so on account of its slight solubility. Dogs sustain 3-6 grms. of the substance internally; 3 grms. in the skin. Rabbits who had 1-1½ grms. distributed in a pocket of the skin showed no toxic symptoms. A patient of Klaussner received weekly 60 grms. applied to a carcinoma, without disturbance. Neumeyer says he saw no special symptoms following the medication of 3-4 grms. per day. In these cases, however, no very large absorbent surfaces came into play, as in the amputation of an arm or leg when innumerable exposed veins and lymphatics would absorb large quantities within a short time, even of corpuscular elements. That it is advisable, however, to exercise some care in the use of orthoform was demonstrated by experiments made by Soulier and Guinard. They report fatal results from a quantity approximating 0.5 gm. to each kilo of the weight of a dog when introduced into the peritoneal cavity. Injected into the veins of a rabbit 0.012 gm. per kilo of the weight of the rabbit was sufficient to cause death. These are quite considerable quantities and from these doses we may deduct that a man could stand several grammes of orthoform very well, introduced into a wound. Some of the cases of burns cited above had 2 gms. dusted upon the very absorbent wounds. In the following cases, in which the wounds, some of them quite extensive, were treated with 1 gm. orthoform, no symptoms of intoxication could be discovered in spite of the ready absorption of the remedy. After two hours the violet orthoform reaction could be determined in the urine, with chloride of iron test.

In three cases of necrotomy of the tibia for osteomyelitis the bone plate was thoroughly smeared over with orthoform, and the periosteum and the edges of the skin dusted with orthoform. One was tamponed with iodoform gauze, and two rapidly healed with formation of the Schede blood scab. The usual severe afterpains were

reduced to a minimum. Also three radical operations for hernia on two patients. In the double operation only the wound of the right side was treated with orthoform-boric acid powder in the proportion of 4 to 1. Healing resulted by first intention in ten days. Secretion of both sides was of a moderate quantity. In the first few days after the operation patient experienced no inconvenience from the right, but a burning and sharp pain in the left side.

One man with incision in the bladder complained only of inconvenience from the drainage catheter.

In three amputations of the leg below the knee—one for arteriosclerotic gangrene and two for gangrene following frozen limbs—the orthoform-boric acid powder, above mentioned, was applied particularly to the severed nerves, to the periosteum and upon the fascia and segments of the skin. The usually sharp burning pains were considerably modified.

In one case of tracheotomy nothing of moment occurred.

As to the usefulness of orthoform and the advisability of its application in capital (major) operations it is rather too soon to give a conclusive opinion, on account of the few cases of major operations treated with orthoform. The cases so far treated would certainly encourage and justify its further use.

Czerny and Trunecek frequently mention the use of orthoform to modify the otherwise very painful injection of arsenic. Pouchet recommends calomel-orthoform injections.

By the great number of iodoform-glycerin injections given in the clinic it was demonstrated in many cases the addition of 5 per cent. of orthoform proved very useful and at the same time harmless. The eminent good services rendered by orthoform injection in painful affections of the bladder deserve special mention.

Three cases of stone in the bladder—one with slight and two with pronounced cystitis and frequent bloody discharge—were treated daily at night with 1 gm. orthoform suspended in a small quantity of physiological sodium chloride solution, and injected after washing out with boric acid. The frequency of the micturitions was thereby reduced from 16 to 3 at night, and the accompanying tenesmus reduced in violence. The irritation of the muscles of the bladder, which at first reduced the capacity of the bladder to 50 c.cm. was so much allayed that in a few days the capacity was increased to 100-200 c.cm. The patient was also enabled to move about more freely without fear of spasms of pain produced by the moving calculi. One case of tubercular cystitis proved equally satisfactory, while two cases

of gonorrhoeic cystitis did not seem to react to the orthoform treatment. Complete success was obtained in the treatment of two cases of prostatitis with purulent cystitis. Besides the very remarkable subjective improvement, the rapid improvement in the condition of the urine was surprising. The urine soon lost its fetid odor—by virtue of the quality of orthoform already mentioned—to stop the ammonia fermentation. These cases reacted much quicker with orthoform than, under the usual treatment with boric and salicylic acid irrigation and internal medication with urotropin. The same may be said of a case of severe cystitis complicated with traumatic stricture of the urethra and uric fistula of the perineum. In this, as in another similar case, a drainage catheter was introduced after excision of the stricture had been performed, and the catheter kept there for some time. As a lubricator for this catheter a 10 per cent. orthoform vaselin was used. Another very thin elastic catheter was also frequently introduced beside the durable catheter, and an injection of orthoform oil—orthoform, 1.0; olive oil, 20.0—made into the neck of the bladder and pars prostatica. To this manipulation is ascribed the fact that in one case the durable catheter was comfortably borne for three weeks. One patient with carcinoma of the bladder, showed marked improvement of the subjective symptoms and of the condition of the urine. The same patient received orthoform treatment for several weeks without apparent disadvantage.

The injections generally being given at night—1-1½ gm. to 2 gm. orthoform—had a most beneficial influence upon the painful tenesmus, the tension of the bladder, number of micturitions and condition of the urine; in all cases except the two of gonorrhoeic cystitis above cited. The failure in these cases of a reaction upon the subjective symptoms was due, as in most cases of affections of the skin and mucous membrane, to the probable absence of ulcerative process. In two cases, one of tubercular, the other of prostatic, purulent cystitis, the cystoscope revealed ulcers with raised edges. It is therefore, rational to assume, from the marked influence upon the subjective symptoms, also in the other cases (especially where calculi was present) the presence of suppurative process, and to claim for orthoform the same diagnostic value in affections of the bladder as it is already credited with in affections of the mucous membranes of the throat and stomach.

With these very favorable experiences on record the failures recorded by Nogues were so much more surprising. In three cases of stone, five tuberculous and four other cystites, he experienced

in most instances an increase of the troubles and no cessation of the pain from orthoform therapy. The reason for these failures is to be found in the fact that Nogues used glycerin as the vehicle for the introduction of the orthoform, on account of the solubility of orthoform in glycerin in the proportion of 5 in 100 parts, and instilled this solution two or three times daily, how much, however, is not stated. Now it is a well-known fact that glycerin applied to excoriations produces violent burning, and that the muscles of the bladder react by contraction from the use of glycerin. For these reasons glycerin is not a fit vehicle for the introduction of orthoform into the bladder, as the glycerin would exert these two very harmful properties before the orthoform would get a chance to act. The orthoform besides would be precipitated as soon as it came in contact with the aqueous urine. A solution of orthoform in glycerin is therefore of no practical value. Besides it is impossible to introduce enough orthoform into the bladder by installation; in using a 5 per cent. glycerin solution it would be necessary to use 20.0 which would be impracticable. A physiological sodium chlorid solution (1 to 30.0 or 50.0) that neither irritates the muscles of the bladder nor the ulcers, is, therefore, preferred as a means of irrigation. This solution can be eminently recommended for use in allaying pain of sufferers from bladder troubles whose general condition is usually very much disturbed.

The possibility of the formation of stone might be advanced, as a theory, by the presence of the almost insoluble orthoform in the bladder. This does not seem probable, however, as no such symptoms have been known in many cases treated. Also as acid as well as alkaline urine will dissolve small quantities of the orthoform, the greater part would soon be removed by frequent micturitions and irrigation of the bladder, besides new solvent fluids being constantly thrown off from the kidneys, the possibilities of stone are very remote. There are furthermore few cases in which a lasting use of orthoform is indicated, except in the case of malignant growths, etc. Mirabeau had good results from orthoform suspended in boric acid solution in anesthetising the bladder and reducing the tension so that it was possible to use the cystoscope upon very sensitive bladders without pain. The good results obtained in the large number of cases (330) treated within two years with orthoform, teach us that the prime object of its use—anesthesia of wounds—was realised in all but a very few exceptional cases. Further, the circumstance that in the many cases of continued use of orthoform, some for weeks and

months at a time, no serious after-effects occurred, is the surest evidence of the harmlessness of orthoform when correctly used.

Only a few local disturbances could be traced to its use. These were mostly vesicular or pustular eczemas, that appeared with moderate itching in the neighborhood of the wound. Of these only 5 in 330 cases occurred. Orthoform gangrene is still rarer. The prime condition essential to the appearance of orthoform eczema seems to be individual intolerance (idiosyncrasy). Too copious use of the powder and localisation of the affection treated are also considered factors in developing eczema. The appearance of orthoform necrosis would necessitate as prime factors, besides individual idiosyncrasy, particularly malnutrition of the tissues under the unfavorable influence of an infection or hyperemia. Keeping these conditions in mind it is easy to avoid the occurrence of these after-effects. Then orthoform should only be used under the direct supervision of a physician; self-application by the patient should not be permitted, as the patient is liable to be deceived as to his condition. The physician can prevent the eczema by avoiding the use of orthoform too freely in the beginning, and by the application of a thick zinc oxide paste around the ulcer. If in spite of this precaution eczema should appear, a discontinuance of the orthoform and applications of a powder and bandaging for two or three days will remedy the trouble. To avoid gangrene, especially in persons afflicted with venous hyperemia of the lower limbs, the patient should be kept strictly in bed, and where infection of the ulcers is suspected treatment with the usual antiseptics must not be neglected. The experiments of the author have further proven that orthoform does not increase the secretions or retard the process of healing.

More we need not wish for. It suffices that orthoform, used in reasonable quantities, especially under the direction of a physician, is an absolutely harmless local anesthetic with which the surgeon is capable of banishing the pain of wounds with an astounding degree of certainty.

IN ORDER to relieve the pain and irritation caused by the removal of dressings adhering to a wound, pour some peroxide of hydrogen over the adherent part of the dressing. This will rapidly soften the coagulated discharges and the dressing will come off readily. This method saves the time employed in prolonged soaking with ordinary solutions, and relieves the apprehension so usually shown by patients at each fresh dressing.—*Canadian Practitioner and Review.*

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges should be addressed to the editor: 284 FRANKLIN STREET, BUFFALO, N. Y.

VOL. XXXIX.—LV.

JULY, 1900.

No. 12.

THE AMERICAN MEDICAL ASSOCIATION AT ATLANTIC CITY.

THE month of June is almost universally acknowledged to be the most delightful of the year, hence it is a fortunate time for the meeting of the greatest medical organisation of the land. When, added to this, it chooses its place on the sea coast to hold its annual convention, especially at so charming a point as Atlantic City, there is little left to be desired as to time or place for such a gathering of distinguished men and women from all parts of the country.

The meeting held June 5-8, 1900, will ever be conspicuous for size, quality of attendance and work done, and for good feeling engendered. The weather was delightful the whole time, and every body seemed contented and happy. The sections were well managed, and the attendance at each was more than ordinarily good, while the work in some was of a conspicuous character. The weekly journals have chronicled this and we shall content ourselves with this general allusion to the general fact.

The registration was over 2,000 which classes the meeting among the largest ever held. This is an indication of the growth of the republic and of the increasing interest manifested in the advancement of medicine along the lines of scientific research. In the distribution of the offices there were no manifestations of unfairness, hence there are no heartburnings left behind. The two most conspicuous candidates for the presidency were men of acknowledged ability and both were well equipped for the task. Dr. Wheaton, of St. Paul, is one of the most eminent surgeons of the Northwest and every way worthy of the place for which his friends urged him with a spirit of manliness

that deserved success. That he was not chosen is no reflection on the candidate or his followers. The spirit in which the canvass was conducted augurs well for his success next time.

Dr. Charles A. L. Reed, of Cincinnati, the president-elect, came to his office with a prestige vouchsafed to few, and perhaps surpassed by none. He is in the very prime of a well-rounded manhood, a scholar of ripe culture, natural and graceful speaker, and as an acquaintance with the profession in the Western hemisphere second to no member of the association. That his administration will result in great advantage to the cause of medical science admits of no reasonable doubt. By a sad *contre-temps* Dr. Reed was summoned home on account of a grievous family affliction, just at the moment when his name was offered to the convention as its next presiding officer. The president at once courteously introduced Dr. Reed and the latter accepted the office in a few eloquent words that well-bespoke the character of the man, who had but just received at the hands of his colleagues the highest indication of the esteem and regard of a great profession.

That one extreme follows another was exemplified again in the selection of the next place of meeting--St. Paul, June 4-7, 1901. The remoteness from the center of the city chosen will perhaps prevent a great attendance, but will be a good meeting and warm hearts will greet the visitors.

As many of the members were returning home they were arrested on their way through Philadelphia by invitations to partake of hospitalities, both public and private, that further exemplified the proverbial courtesy that reigns in the city of brotherly love. The Medical Club, on Saturday evening, June 9th, tendered a reception to Drs. Abraham Jacobi, of New York; Alonzo Garcelon, of Maine, Frank Billings and George H. Simmons, of Illinois, and J. W. Bodine, of Kentucky. The Bellevue, where the reception was held, was crowded to overflowing and, between the supper, the speeches, and the geniality of the hosts, good fellowship was at large until midnight.

Dr. F. X. Dercum, professor of neurology at Jefferson Medical College; Dr. Frank Woodbury, professor of laryngology at the Philadelphia Polyclinic; Dr. Judson Daland, editor of the *International Clinics*, and other prominent Philadelphia physicians, entertained many of the visitors at breakfasts and dinners on Saturday. Such courtesies are always appreciated and betoken a spirit of friendliness

that serves to unite professional men in a closer bonds of union and friendship.

Buffalo was well represented at the meeting. Among those present were Drs. Roswell Park, Herman Mynter, Charles G. Stockton, Allen A. Jones, Julius Ullman, Ernest Wende, S. A. Dunham, A. A. Hubbell, Lorenzo Burrows, A. L. Benedict, Delancey Rochester and J. W. Grosvenor.

The Medical Editors' dinner, on Monday evening, June 4th, at The Dennis, which at 3 o'clock in the afternoon threatened a failure, turned out a great success. The number present was large, the speeches were good, and the treasury showed a balance on hand.

The section on pediatrics gave a dinner as usual, but this year it was in part a compliment to Dr. Abraham Jacobi, to whom a loving cup was presented. Dr. F. X. Dercum, the eminent Philadelphia neurologist, was present by invitation at this dinner, and made one of the happiest of speeches, that did credit to himself as well as the guest of honor.

PENNSYLVANIA is following the current of opinion in regard to the out-door treatment of consumption.

Dr. J. T. Rothrock, commissioner of forestry in that state, is strongly in favor of throwing open to consumptives the forest lands owned by the state. He says these reservations are the property of the people, and are to be used wholly in the public interest. The relation of the high woodlands of Pennsylvania to public health was distinctly recognised when the act creating the forestry commission was drawn up. It was provided that the president of the state board of health should be ex-officio a member of the commission which located the forestry reservations, so that these reservations were from the start pledged to the maintenance of public health, so far as they could be serviceable.

In a recently reported interview Dr. Rothrock is reported as saying that it has been suggested, not without careful consideration, that it would probably prove a wise policy if the state were to erect cheap frame buildings, some large enough for a family, some suitable for a few friends, which would provide simply shelter from wind and rain and a safe place for a cheerful fire; in other words, furnish all of the open air advantages of a camp, without its unnecessary

exposure, and that these booths should be so located that the reservation guard would be on hand to prevent danger from fire or dissipation, which would defeat the healthful influences of the plan. These buildings could be rented for a nominal sum for a month or for a season, from May until December. Those occupying them could do their own cooking and live as cheaply or as expensively as they wished. The expense to the state would be almost nothing, because such buildings could be erected as needed on a few days' notice, and the rental would soon pay first cost.

This appears to be a feasible and economical plan for state control of incipient consumptives and we hope it will be given a trial.

PERSONAL.

MAJOR A. H. BRIGGS, M.D., of Buffalo, Surgeon 65th Regt., N.Y. S.N.G., attended the recent meeting of the Association of Military Surgeons of the United States at New York City. Dr. Briggs is an active member of the Association, was one of the founders, and enjoys the confidence and esteem of the association. He delivered the address of welcome at the meeting, and took a prominent part in its proceedings.

DR. ABRAM TUCKER KERR, of Buffalo, a graduate of Cornell in the class of 1895, and of the Medical Department of the University of Buffalo in 1897, has been appointed assistant professor of anatomy, to fill the recently created chair at Cornell University. This will be a distinct loss to Buffalo, and as distinct a gain to Cornell.

DR. MARCEL HARTWIG was elected president of the Buffalo Academy of Medicine at the last annual meeting. Dr. Hartwig signaled his election by offering a prize of \$50, cash or value, for the best essay on a scientific medical subject by a member of the Academy, to be presented during the academic year.

DR. SAMUEL G. GANT, of Kansas City, Mo., recently elected professor of rectal and anal surgery in the New York Post-Graduate Medical School and Hospital, has removed to No. 58 West 56th Street, New York City.

DR. F. W. MCGUIRE, of Buffalo, was elected secretary of the section on pathology of the Academy of Medicine, at the recent annual meeting of the section.

DR. ABRAHAM JACOBI, of New York, president of the Medical Board of Mount Sinai Hospital, lately received a silver tankard as a gift from the Medical Board and the 4,200 members of the hospital on the occasion of the seventieth anniversary of his birth. The presentation was made by President Wallach of the hospital, who spoke of the service Dr. Jacobi had rendered the hospital for forty years. Dr. Jacobi made an appropriate response. Dr. Jacobi, who is professor of the diseases of children in the College of Physicians and Surgeons, also received the degree of LL.D., at the recent annual commencement of Columbia University.

DR. EUGENE A. SMITH and Dr. Nelson G. Russell, of Buffalo, have been appointed on the staff of visiting physicians at the Fresh Air Mission Hospital at Athol Springs for this season.

DR. S. GOLDBERG, of Buffalo, will sail on the "St. Louis," July 4th, for several months recreation and study in Europe.

DR. EUGENE A. SMITH, of Buffalo, was elected chairman of the section on pathology, Buffalo Academy of Medicine, at the meeting held June 19, 1900.

DR. ERNEST WENDE, of Buffalo, was elected chairman of the section on State Medicine at the recent meeting of the American Medical Association at Atlantic City. On his return from this meeting Dr. Wendé fell ill with appendicitis, but happily has made a prompt recovery, and is again attending to his professional and official duties.

OBITUARY.

DR. JOSEPH H. SUTHERLAND, of Niagara Falls, died at his home June 18, 1900, aged 59 years. For several weeks he had suffered from general debility. Dr. Sutherland was born in Canada on October 13, 1840. He attended the Toronto public schools. After receiving a common-school education he studied medicine and surgery. When the Civil War broke out he became a member of the

hospital corps of the Confederate Army and served three years and six months. In 1865 he entered the University of Philadelphia and was graduated from that institution in 1867. He practised his profession and devoted some of his time to mining in California from 1867 to 1870. He next engaged in the oil business for six years in Oil Creek, Pa. He then removed to Butler County, Pa., and practised as a physician and surgeon. Afterward he spent some time in Mexico. In Washington, D.C., he made his home from 1888 to 1892. In the latter year he came to Niagara Falls, and lived there until his death. He was a member of the Board of Health for several years. He leaves a widow and two children.

DR. JAMES T. WHITTAKER, of Cincinnati, O., died at his home in that city, June 5, 1900. Dr. Whittaker was one of the most celebrated clinicians of the period, a teacher of renown, an author of distinction, and a practitioner famous throughout the country. His contributions to the literature of medicine were important in character and his death is a distinct loss to the guild. He was graduated in 1866, but, singularly enough, none of the notices published give his age. He was, however, comparatively a young man to have attained his great distinction.

DR. PAUL GIBIER, of New York, founder and head of the Pasteur Institute, at No. 313 West Twenty-third St., died at midnight on Saturday, June 9, 1900, at his summer home at Suffern, as a result of a fracture of the skull, received by being thrown from his carriage.

Dr. Gibier was born in the Department of André, France, on October 9, 1851. He was early a student at the University of Paris and was a graduate of the medical department. For some time he was assistant professor of comparative medicine in the Paris Museum, and was resident physician in several of the more prominent Paris hospitals.

In 1885, Dr. Gibier was commissioned by the French Government to study the cholera epidemic that was then raging in Spain, and his work in that line procured for him a gold medal from the French Republic. In 1886 he was made a member of the Legion of Honor on account of work done by him in the cholera plague in the South of France. In 1888 he was sent by the French Government to study the yellow fever conditions in Havana and Florida. On his way home he stopped for some time in New York City.

Dr. Gibier returned to this country in 1889, and in 1890 established the Pasteur Institute at No. 313 West Twenty-third Street. He had recently completed a handsome building at Suffern, and was preparing to open a sanitarium there.

Dr. Gibier leaves a wife and nephew in this country, and his mother and a sister in France. The nephew, Dr. George G. Rambaud, will probably succeed to the direction of the institution.

DR. MELANCTHON STORRS, of Hartford, Conn, died at his home in that city, June 9, 1900, aged 76 years. Dr. Storrs was one of the most celebrated surgeons of his time, served with credit in that capacity in the Civil War, worked up to the last moment, and died of sepsis received at an operation. His loss is deeply regretted by a large acquaintance. He was an honorary Fellow of the American Association of Obstetricians and Gynecologists.

SOCIETY MEETINGS.

THE Lake Erie Medical Society held its regular quarterly meeting at Central Hotel, Angola, N.Y., June 29, 1900. The following program was announced: Diphtheria, E. W. Janes, Hamburg, N.Y.; Paper, C. S. Pugsley, Gowanda N. Y.; early and late operation for appendicitis, Eugene A. Smith, Buffalo, N.Y.; Treatment of retro-displacements of the uterus, Herman E. Hayd, Buffalo, N.Y.

THE Medical Society of the County of Chautauqua will hold its meeting at Chautauqua, July 10, 1900. Drs. Sidney Graber and W. S. Bainbridge, of New York City, and J. H. Pryor and Wm. C. Krauss, of Buffalo, N.Y., will read papers in the afternoon before the society.

THE American Electro-therapeutic Association will hold its tenth annual meeting, September 25, 26 and 27, 1900, at the Academy of Medicine in New York City. Two discussions are announced as follows: Electricity in gynecology and the present reluctance of gynecologist to use electricity; Electricity in tuberculosis and the present modes of treatment.

The president is Dr. Walter H. White, 220 Marlborough Street, Boston, Mass.; Dr. Robert Newman, 148 West 73d Street, New York City, is chairman Committee on Arrangements; and Dr. Geo. E. Bill, 255 North Street, Harrisburg, Pa., is Secretary.

THE Rochester Academy of Medicine held its regular quarterly meeting at the Reynolds Library, Wednesday, June 20, 1900. The surgical section provided the following program: I. Presentation of patients. (a) Tuberculosis of the wrist joint, E. W. Mulligan; (b) Abscess of the kidney, Henry T. Williams. II. Pathological specimens. (a) Fracture of the neck of the femur; (b) Hourglass constriction of the stomach; (c) Gallstone, Wm. L. Conklin. III. Discussion: Surgical tuberculosis. (a) Symptomatology and diagnosis of tubercular disease of the bones and joints, illustrated by lantern slides, radiographs and pathological specimens, Louis A. Weigel; (b) The surgical treatment of tuberculosis of the bones and joints, E. W. Mulligan; (c) Surgical treatment of tubercular peritonitis, J. P. Creveling, Auburn, N. Y. Dr. John O. Roe is the chairman, and Dr. E. Wood Ruggles, is the secretary.

THE Buffalo Academy of Medicine held meetings during the month of June, 1900, as follows:

Section on Surgery—Tuesday evening, June 5th. Program: Bennett's New method of anesthesia, Prescott Le Breton; Some notes on gonorrheal rheumatism, with report of cases, J. Henry Dowd.

Section on Ophthalmology, Otology, Rhinology and Laryngology.—Monday evening, June 11th. Program: Contributing to the etiology and treatment of phlyctenular disease, Lorenzo Burrows; Further report of a case of tubercular tumor of the nasal septum, J. C. Clemesha; Effect of antitoxin serum on the blood, Geo. F. Cott.

Annual Meeting.—Tuesday evening, June 12, 1900. Program: Reports of officers. An address on Puerperal infection, by the retiring President, Matthew D. Mann. Discussion by Drs. P. W. Van Peyma, H. D. Ingraham, M. A. Crockett, L. G. Hanley and L. Schroeter.

Section on Pathology.—Tuesday evening, June 19th. Program: Unusual carcinoma of the colon and stomach, Herbert U. Williams. Discussed by Dr. Eugene A. Smith.

Section on Obstetrics.—Tuesday evening, June 26th. Program: Pelvic inflammation, M. A. Crockett; Nervous disturbances during menopause, Lillian C. Randall; Infant feeding, Maud J. Frye.

COLLEGE AND HOSPITAL NOTES.

THE Albany Medical College held its 69th annual commencement, Wednesday, May 2, 1900. Dr. Albert Vander Veer, dean, presided. Dr. James H. Canfield, librarian of Columbia University, delivered the address to the graduates. The class numbered 125, and was one of the largest and best ever sent out by this famous institution.

Dr. George Lenz, of Gloversville, was the class valedictorian, acquitting himself in a most creditable manner.

At the Alumni banquet Dr. Vander Veer acted as toastmaster. Dr. Thos. D. Crothers, '65, of Hartford, was elected president of the Alumni Association. Dr. Walter H. Conley, '91, of the Buffalo State Hospital, was in attendance at the meeting.

THE Buffalo Fresh Air Mission Hospital, at Athol Springs, opened June 30, 1900. It is situated on the Lake Shore, ten miles from Buffalo, is reached in twenty-five minutes by train, and is most favorably placed for the treatment of infants and children suffering from cholera infantum and other diarrheal diseases. Physicians are urged to send to the hospital any case of cholera infantum or infantile diarrhea which would be benefited by country air. The attention of the profession is called to the fact that until the wards are filled with cholera infantum cases, children afflicted with any medical or surgical disease, not contagious, will be gladly received.

The hospital is free, is equipped with all necessary apparatus, and is provided with resident physicians and trained nurses. Information furnished by Dr. Irving M. Snow, 476 Franklin Street, or Dr. DeWitt H. Sherman, 666 Main Street, or at Fitch Hospital, 165 Swan Street. In urgent cases telephone the Fitch Institute.

THE Batavia Hospital, of which mention was made in the JOURNAL several months ago, is now an accomplished fact. A recent meeting of the Women's Hospital Association was held at which articles of incorporation were adopted as follows:

First—The name of the proposed corporation shall be the Woman's Hospital Association of Batavia, N.Y.

Second—The principal office of the proposed corporation shall be at Batavia.

Third—The number of directors of the proposed corporation shall be 15.

The fourth paragraph gives the names of the persons mentioned below, who are to serve as directors until their successors shall have been elected at the annual meeting of the proposed corporation.

Fifth—The annual meeting of the proposed corporation shall be held on the second Thursday in May at 3 o'clock in the afternoon on each and every year.

Sixth—All members of the proposed corporation shall be adherents of either the regular, homeopathic or eclectic systems of medical practice and the medical practice or treatment to be used or applied in such hospital shall be one or the other of the systems above mentioned.

There are already more than 100 members of the association and the following is the list of names of the incorporators: Mrs. T. J. Perfield, Mrs. S. A. Sherwin, Mrs. W. Harris Day, Mrs. Alice G. Fisher, Mrs. H. J. Burkhart, Mrs. M. Moynihan, Mrs. H. Young, Mrs. J. C. Baker, Miss Lydia M. Bates, Mrs. F. S. Wood, Mrs. J. S. Casey, Mrs. Hinman Holden, Mrs. C. A. Johnson, Mrs. Gardner Fuller and Mrs. A. E. Clark.

It is probable that a number of Buffalo physicians will be attached to the staff as consultants and specialists.

A DETENTION hospital is very much needed in Buffalo. This is an important port where hundreds of sailors are arriving and departing daily and when one becomes suspected of small-pox or other contagious disease there is no place to assign him pending the development of the case, except to the pest house.

A good quarantine hospital with a detention department should be built without delay. Recently the Health Commissioner, Dr. Wende, has been obliged to quarantine two vessels on account of small-pox suspects, much to the loss of the ships, but there was no other way under the present conditions. Dr. Wende's views on the subject are pronounced and intelligent and should be listened to attentively by the Common Council.

Book Reviews.

THE PRINCIPLES OF TREATMENT AND THEIR APPLICATION TO THE PRACTICE OF MEDICINE. BY J. MITCHELL BRUCE, M. D., F. R. C. P., Lecturer on the Practice of Medicine in the Charing Cross Hospital, London; Examiner in Medicine, Royal College of Physicians, London. Revised to conform with the U. S. Pharmacopœia by E. Q. THORNTON, M. D., Jefferson Medical College, Philadelphia. In one 8vo volume of 625 pages. Philadelphia: Lea Brothers & Co. 1900. [Price, \$3 75.]

This work has been constructed on entirely new lines. Every student of medicine upon graduation deems himself a therapeutic master; he will be fortunate, however, if within a decade or two he does not become a therapeutic nihilist. Both of these extremes are

to be deprecated. They might be avoided if books like this were written oftener and studied earlier.

The author asks a most pertinent question at the outset—one that occurs at the beginning of the treatment of every sick person. It is: What are the objects of treatment? Bruce, in writing this treatise, addresses himself to the answer of this question, and that he does so intelligently must be admitted by every one who reads the book. He does not commence with therapeutical laws—ready-made and fashioned to the case—but starts out to find them through the familiar facts of etiology, pathological anatomy and the clinical characters of disease. His chapter on the principles of treatment founded on etiology is a classical presentation of this elementary subject. In it he discusses the origin of disease and the natural resistance of the human body thereto, and then makes a searching look for etiological indications. In the chapter on principles of treatment founded on pathology, he pursues a similarly exhausted search for pathological indications. He makes the study exceedingly interesting by the novelty of his methods and the clothing of his ideas in attractive words.

Proceeding next to discuss the principles of treatment, founded on the clinical characters of disease, he presents a picture of transcendent interest described in elegant diction. One of the strong characteristics of the author is the forceful manner in which he discusses matters pertaining to convalescence—a subject that has heretofore received too little attention. An imprudence during the convalescent period often leads to the forfeiture of a life.

A short chapter is devoted to the principles of treatment founded on the personal factor in disease, and then comes one entitled, the proper relation of treatment to disease. In this chapter Bruce asserts that medicine can be justified by an appeal to nature as well as to sympathy. The therapeutic pessimist will gather small comfort from the teachings of this author. In speaking of the means of treatment, he gives a brief survey of the groups of remedial measures, but makes no attempt to discuss drugs as they fall under the department of materia medica and therapeutics, which Bruce has discussed in another volume. Everybody should read his chapter on the art of treatment. He discusses this entirely apart from the science of treatment. One of his clear ideas drops suddenly upon the reader like a thunderbolt from a clear sky as follows:

“Personal experience and responsibility quickly undeceive the young practitioner. He finds that the theory of treatment and the practice of it as an art are two very different things. The practice of medicine and surgery is a real art: it means doing and using that which is best in the particular instance before us; not copying in a routine and mechanical fashion what has been done in other instances. Routine treatment is bound to fail more or less completely when put to the test of practice, even if based on sound, general principles.”

The remaining chapters of the book are devoted to the consideration of illustrations of the principles of treatment. These are applied in a unique manner. At the end of each disease chosen to illustrate

the principles taught by the author, an outline of practice is given, which is a summary of the whole proceeding from the commencement of the case to the end of convalescence. A well-prepared index brings to a close this admirable volume.

This is one of the recent works for which there is ample room and no apology need be made for its appearance at this time. It is one of the most helpful books to the general practitioner of medicine that has been published within a decade.

THE PRINCIPLES AND PRACTICE OF MODERN SURGERY. For the Use of Students and Practitioners of Medicine and Surgery. By JOHN B. ROBERTS, M. D., Professor of Anatomy and Surgery in the Philadelphia Polyclinic; Mütter Lecturer on Surgical Pathology of the College of Physicians of Philadelphia. New (2d) and revised edition. In one very handsome fvo volume of 838 pages, with 474 engravings and 8 plates in colors and ironchrome. Philadelphia: Lea Brothers & Co. 1900. [Cloth, \$4.25 net; leather, \$5.25 net.]

In the second edition of this work the author has not only revised the text throughout but has rewritten and enlarged several sections, notably those on appendicitis, diseases and injury of the joints and dislocations. The object of the author has been to write an essentially practical work, giving only the generally accepted operative procedures and surgical principles of the present time. Much space is devoted to the consideration of modern pathology and its teachings. Theories, traditional views and operations, new methods of questionable value and references to literature have been entirely omitted. Consequently, the book is compactly and succinctly written. The style throughout is clear and direct and especially suitable for the student.

The chief fault to be found in the work is a want of completeness—a frequent omission of minor but often important details, a fault so common and yet so easily remedied by the addition of a word phrase or short sentence. This would frequently compel the reader to look elsewhere for additional or special points. For example, in describing the operative treatment of gall stones in the common duct, the author simply mentions the various procedures without giving indications for or against the different methods. He does not tell us how to suture the duct after removal of the stone, nor whether to guard the wound in the duodenum with gauze packing after incision. In speaking of the treatment of chronic gonorrhea with involvement of the seminal vesicles, he advises the plan of milking out the discharge by rectal palpation, but omits to say how long or how often to apply the pressure. Abbe's catgut rings for intestinal anastomosis are alluded to, but there is no hint to guide one in making them. In the treatment of flat-foot he says, "much comfort is often given by placing in the shoe a metal plate to restore the arch of the foot," and the reader must look elsewhere for further information, if he cares to employ this device. Ten lines are deemed sufficient to describe the operation of vaginal hysterectomy. After one page is devoted to the operation for hemorrhoids by clamp and cautery, one short paragraph

only gives the Alexander operation with the omission of practical points as to suturing the mucous membrane. In other words, the author slights certain few sections and deals fully with the remainder. The whole subject of fractures is admirably handled in every particular. The majority of the illustrations are new, many of them being taken from the author's own cases. The fact that the whole work is written by one man of unquestioned authority, and does not represent the teachings of a dozen of varying ability enhances its value. The book is most attractively bound and printed.

P. LEB.

SCATTERED LEAVES FROM A PHYSICIAN'S DIARY. By ALBERT ABRAMS, A. M., M. D. (Heidelberg), F. R. M. S., Author of "The Antiseptic Club." St. Louis, Mo.: The Fortnightly Press Co. 1900.

The author of "The Antiseptic Club" has blossomed out as a short story writer in this little work and has given us something of an unusual collection of stories bearing on medical matters and medical men. There is just enough of a scientific flavor about the collection to give them a professional stamp, and as stories, judged from a purely literary viewpoint, they are, in the main, much better than the usual storiette we run across nowadays. Octave Thanet, by all means the most accomplished short story writer of today, has hardly written anything more acceptable than Dr. Abram's "A Mystery of the Latin Quarter," or "The Euthanasia Club."

In these clever stories, Dr. Abrams, with the inborn instinct of the true short story writer, touches all the human emotions from the queerly ludicrous to the tenderly sad, not omitting a flight now and again into the bizarre.

All in all the volume is a highly interesting little collection of stories and is well worth the reading at odd times. N. W. W.

PROGRESSIVE MEDICINE. Volume II., 1900. A Quarterly Digest of Advances. Discoveries and Improvements in the Medical and Surgical Sciences, Edited by HOBART AMORY HARE, M. D., Professor of Therapeutics and Materia Medica in Jefferson Medical College of Philadelphia. Octavo, handsomely bound in cloth, 401 pages with 81 engravings. Issued quarterly. Philadelphia and New York: Lea Brothers & Co. [Price, \$10 per year.]

This volume contains articles on surgery of the abdomen, including hernia; gynecology; diseases of the blood; diathetic and metabolic diseases; diseases of the glandular and lymphatic system, and upon ophthalmology.

The first named subject is presented by Dr. William B. Coley and occupies the first 132 pages of the book. In it he describes the newest phases of the surgery of the stomach, (the whole subject being measurably new) appendicitis, hernia, and abdominal tumors, added to which is a delineation of the use of the x-ray in the detection of abdominal calculi. The illustrations of this section are especially to be commended for their number, accuracy, and clearness.

The article on gynecology is written by Dr. John G. Clark and, as might be expected, is chiefly a résumé of the work of the Johns

Hopkins School and its coterie of admirers. On the topic "Kraurosis vulvæ," for example, we fail to discover any reference to the writings of Charles A. L. Reed, who was one of the first to describe the condition with accuracy; or to Howard W. Longyea's paper, which followed up the topic with later data. The subjects, however, are well presented and some of the illustrations are good.

The section on diseases of the blood and disorders of metabolism, is written by Dr. Alfred Stengel. It is needless to add that the whole subject is admirably and instructively presented. The most valuable literature of the entire field has been gleaned and the section is of great practical interest.

The section devoted to the consideration of ophthalmology is prepared by Dr. Edward Jackson. It is a carefully selected compendium of recent advances in diseases of the eye and is particularly adapted to the needs of the general practitioner of medicine.

The year's events in these several fields have been well compiled and the volume is a distinct addition to the library needs of busy physicians.

PRACTICAL ANATOMY Including a Special Section on the Fundamental Principles of Anatomy. Edited by W. T. ECKLEY, M. D., Professor of Anatomy in the College of Physicians and Surgeons, University of Illinois; Professor of Anatomy in the Northwestern University Dental School; Professor of Anatomy in the Chicago Clinical School, and Director of the Chicago School of Anatomy and Physiology; Member of the American Medical Association, the Chicago Pathological Society, the Chicago Medical Society, etc.; and MRS. CORINNE DUFORD ECKLEY. Instructor of Anatomy in the Northwestern University Woman's Medical School; Professor of Anatomy in the Chicago School of Anatomy and Physiology. With 347 illustrations, many of which are in colors. Octavo. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1899 [Price, cloth, \$3.50 net; oil cloth, \$4.00 net.]

This work will be found a great help to the beginner in the study of anatomy for the authors have blended together, in a practical manner, anatomical structures as found in the dissecting-room with little quizzes that go a long way toward elucidating the subject. The book is profusely illustrated and stress is laid on the relations between the somatic and sympathetic nerves in a way quite new to the usual treatise on anatomy. A dissecting-room guide to any descriptive anatomy is always a help to the student and in this work is found a valuable introduction and guide to Gerrish's Descriptive Anatomy, lately published. As a quiz compend on anatomy and a guide to dissection it fills a useful place.

M. C.

ESSENTIALS OF SURGERY. Seventh edition, with a chapter on Appendicitis. Ninety illustrations. By EDWARD MARTIN, M. D. Question Compend. Philadelphia: W. B. Saunders. 1900. [Price, \$1.00 net.]

This edition contains a few corrections over the former edition and is still listed under the category of works on surgery for the hurried physician and the medical student. As a text-book for the beginner it fills a place in starting him to study surgery in a logical method, if not in a complete manner as regards to details. The pathology and diag-

nosis in some instances should be rewritten to meet with the more modern views. Medical students are more carefully instructed in pathology than they were ten years ago and a presupposition of a certain amount of technical knowledge would make a better book.

M. C.

A HAND-BOOK FOR NURSES. By J. K. WATSON, M. D., Edin., Late House-Surgeon Essex and Colchester Hospital; Assistant House-Surgeon Sheffield Royal Infirmary and Sheffield Royal Hospital. American edition, under supervision of A. A. STEVENS, A. M., M. D., Professor of Pathology in the Women's College of Pennsylvania, etc. Philadelphia: W. B. Saunders. 1900. [Price, \$1.50.]

From the preface of Dr. Watson's book is quoted the following:

We cannot prevent nurses from attempting to acquire a certain amount of medical knowledge; and if we could, I should be no party to such a procedure. What we should rather aim at is to judiciously cater for this appetite and to use our influence to prevent the illegitimate use of such knowledge. It is common experience that the more highly qualified is the nurse the less likelihood is there of her attempting to usurp the rôle of the medical man; it is the ignorant and the badly trained nurse who thus brings discredit on her nursing-sisters.

The book admirably fulfils the purpose above indicated, that of giving a clear and satisfying amount of medical knowledge to the nurse. With a somewhat extended acquaintance with books on nursing and for nurses, the reviewer knows of none which so perfectly fits in to supply this gap in a nurse's training and a nurse's library.

M. J. F.

A POCKET MEDICAL DICTIONARY. Giving the pronunciation and definition of the principal words used in medicine and the collateral sciences, including very complete tables of clinical eponymic terms; of the arteries, muscles, nerves, bacteria, bacilli, micrococci, spirilla and thermometric scales; and a dose-list of drugs and their preparations in both the English and metric systems of weights and measures. By GEORGE M. GOULD, A. M., M. D. Fourth edition, revised and enlarged, containing 30,000 words. Philadelphia: P. Blakiston's Son & Co 1900. [Price, \$1.00.]

This excellent pocket dictionary has been constantly improved with each edition since it first appeared, until now it leaves little to be desired in the line of its particular sphere of usefulness. It is well printed in clear type, on good paper, and is bound in strong, black morocco, flexible covers. It first contained about 12,000 words and now defines some 30,000 medical terms, which amply equips the student or practitioner with a handy lexicon that is brought down to date in all essentials for the class-room, laboratory, or office desk. We commend it most cordially to everybody who wants such a condensation for ready reference; and who does not?

BOOKS RECEIVED.

Twenty-fifth Annual Report of the State Board of Health of the State of Michigan. For the fiscal year ending June 30, 1897. Henry B. Baker, M. D., Secretary. Lansing, Michigan. 1900.

Transactions of the Twenty-first Annual Meeting of the American Laryngological Association. Held in the City of Chicago, Ill., May 22, 23 and 24, 1899. New York: D. Appleton & Co. 1900.

A Text-Book of Practical Therapeutics. With Especial Reference to the Application of Remedial Measures to Disease and their Employment upon a Rational Basis. By Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. With special chapters by Drs. G. E. deSchweinitz, Edward Martin and Barton C. Hirst. New (8th) edition. In one 8vo volume of 796 pages, with 37 engravings and 3 colored plates. Cloth, \$4.00; leather, \$5.00 net. Philadelphia and New York: Lea Brothers & Co. 1900.

Normal Histology. By Edward K. Dunham, M. D., Professor of General Pathology, Bacteriology and Hygiene in the University and Bellevue Hospital Medical College, New York. New (2d) edition. In one very handsome 8vo volume of 319 pages, with 244 illustrations. Cloth, \$2.50 net. Philadelphia and New York: Lea Brothers & Co., Publishers. 1900.

A Manual of Obstetrics. By A. F. A. King, M. D., Professor of Obstetrics and Diseases of Women in the Medical Department of the Columbian University, Washington, D. C., and in the University of Vermont, etc. New (8th) edition. In one 12mo volume of 612 pages, with 264 illustrations. Cloth, \$2.50 net. Philadelphia and New York: Lea Brothers & Co., Publishers. 1900.

Suggestions to Medical Writers. By George M. Gould, M. D. Duodecimo, pp. 185. Philadelphia: The Philadelphia Medical Publishing Co. 1900.

Medical and Surgical Report of the Presbyterian Hospital, City of New York. Volume IV., January, 1900. Andrew J. McCosh, M. D., and W. Gilman Thompson, M. D., editors.

Atlas and Epitome of Special Pathologic Histology. By Docent Dr. Hermann Duerck, Assistant in the Pathologic Institute; Prosecutor to the Municipal Hospital L. I. in Munich. Authorised translation from the German. Edited by Ludvig Hektoen, M. D., Professor of Pathology in Rush Medical College, Chicago. Price, \$3.00 net. Philadelphia: W. B. Saunders. 1900.

Annual and Analytical Cyclopaedia of Practical Medicine. By Charles E. deM. Sajous, M. D., and 100 associate editors. Assisted by corresponding editors, collaborators and correspondents. Illustrated with chromo-lithographs, engravings and maps. Volume V. Methyl-Blue to Rabies. Philadelphia, New York and Chicago: F. A. Davis Co. 1900.

Contributions from the William Pepper Laboratory of Clinical Medicine, University of Pennsylvania. Published on the Phoebe A. Hearst foundation. Edited by Alfred Stengel, M. D., Director. Philadelphia. 1900.

Diseases of the Chest, Throat and Nasal Cavities. Including Physical diagnosis and diseases of the lungs, mediastinum, heart and aorta, laryngology and diseases of the pharynx, larynx, nose, thyroid gland and esophagus. Fourth edition, revised. With 255 illustrations; 8vo, 765 pages. By E. Fletcher Ingals, A. M., M. D., Professor of Laryngology and Practice of Medicine, Rush Medical College; Professor of Diseases of the Throat and Chest, Northwestern University Woman's Medical School, etc., etc. New York: William Wood & Co. 1900. [Price, muslin, \$4.50; sheep, \$5.25.]

LITERARY NOTES.

THE *Journal of Surgical Technology* is the title of a new periodical to be published monthly, beginning July 1, 1900. It will be devoted to the consideration of the technic of surgical procedures, at a subscription price of \$1.00 a year. Premiums are offered with the first subscriptions. Address the Technique Publishing Co., 404 East 14th street, New York City, N. Y.

THE *Memphis Medical Monthly* one of our sterling exchanges, has absorbed the *Memphis Lancet*, a most excellent step in the direction of consolidation and reduction of the medical journal force.

MESSRS. WILLIAM WOOD & Co., medical publishers of New York, announce the early republication of the Reference Handbook of the Medical Sciences, edited by Dr. Albert H. Buck of New York City. When this work was first issued it proved to be very popular and its success was such that it inaugurated an entirely new system in the production of encyclopedic medical works.

The rapid advances in medicine and surgery during recent years necessitates entirely rewriting the work from beginning to end. The staff of department advisers and contributors, numbering in all about 500 physicians, are at work upon it and it is expected the first volume will be issued about August 15, 1900.

The illustrations will be of the finest quality including many exquisite chromo-lithographic plates. The paper will be highly finished and altogether it will be a superb edition.

ITEMS.

OF INTEREST TO THE BEGINNER.—The office equipment of the late Dr. George S. Palmer is offered for sale, as will be noted by reference to advertising page xxx. A physician beginning practice who needs books, electric batteries, and office furniture will find at 325 Franklin Street much that he stands in need of at low prices.

THE New York Pharmacal Association has prepared for distribution to the medical profession a handsome and artistic *perpetual* calendar, which is now ready for mailing. Instead of presenting a calendar at the beginning of the year, according to the usual custom, this company prefers the season when the physician is not deluged with all sorts and conditions of chronological recorders, and is thus better enabled to welcome and appreciate such an addition to his office. The new lactopeptine perpetual calendar is not intended for hanging upon the wall, but to stand upon the doctor's desk, and for this reason has a strong easel back to support it. The coloring is exceedingly soft and attractive, consisting of delicate shades of lavender, purple, crushed strawberry, and buff-yellow. The few words relative to lactopeptine are entirely unobtrusive, and do not interfere in the least with the general artistic effect. In the near foreground on either side are two gracefully-draped female figures with flowing hair; around the edges appear the various signs of the zodiac.

One of these calendars will be sent to any physician who may request same.

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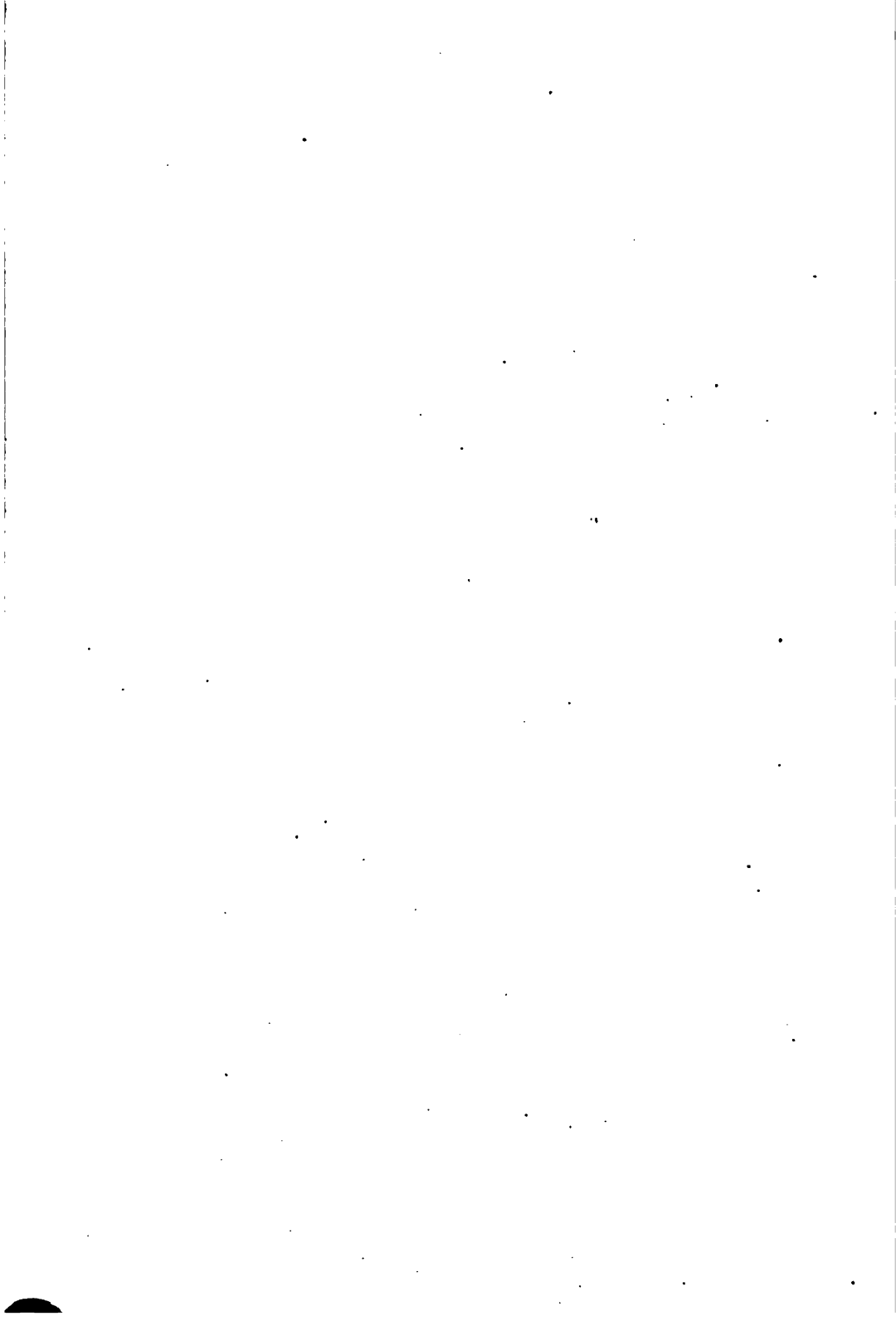
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